

Immunization Coverage Report

State of Utah: 2008



Utah Department of Health
**IMMUNIZATION
PROGRAM**

Immunize for healthy lives

Immunization Coverage Report

State of Utah: 2008

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The *Immunization Coverage Report, State of Utah 2008*, supports the mission and goal of state and local immunization programs:

... to improve the health of Utah's citizens through vaccinations to reduce illness, disability, and death from vaccine-preventable infections.

This annual *Immunization Coverage Report* provides an overview of immunization information about Utah residents across the lifespan. Particularly, the immunization coverage status for Utah children and adults is highlighted. Although the report is not totally comprehensive, it is an attempt to gather immunization data from multiple, pertinent sources and present them in a simple, concise format. Information is added and updated each year according to recommendations by various stakeholders at state and local levels. Such updates enable easy access to the most current immunization data and to assist local immunization programs in evaluating coverage areas and identifying gaps in services.

An ongoing major focus of immunization coverage remains the infant and early childhood population. According to the 2007 National Immunization Survey (NIS), Utah ranked 39th in the nation for the number of two-year-olds who were fully immunized. The NIS measures the number of children 19-35 months of age who have completed the 4:3:1:3:3:1 (4 DTap, 3 Polio, 1 MMR, 3 Hib, 3 Hepatitis B, and 1 Varicella) series by 24 months of age. Utah's current coverage rate of 73.6% lags behind the national rate of 77.4%. These rates indicate that much work remains to achieve the *Healthy People 2010* objective of 80% coverage level for two-year-olds.

Because in the most recent survey Utah rates were lower than previous years, the focus of work continues to identify areas of weakness where efforts can be concentrated to effect significant improvements. To ensure this focus, Utah held its third annual statewide Immunization Summit in January 2008, which brought together all stakeholders to discuss methods and strategies to increase immunization rates.

Ongoing efforts to increase childhood immunization levels include a variety of interventions, such as: ensuring that health care providers have current information on immunization best practices; implementation of a coordination project with the Intermountain Pediatric Society; enrolling health care providers in the Utah Statewide Immunization Information System (USIIS); and use of a new immunization timing schedule which can better help parents and providers know when a child needs an immunization. All these efforts combined can help to ensure Utah's children are protected from vaccine-preventable infections now and in the future.

We value your opinion, and welcome your feedback about this report.

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For simplicity of organization, the 12 local health districts (LHDs) have been utilized in this report as the geographic boundaries of reporting service areas. Statewide information is also presented. For each service area, the information is divided into three broad categories: *Demographic and Socioeconomic Factors*; *Early Childhood Immunization*; and *Child and Adult Immunization*. There are detailed descriptions of data contained within each of these categories on the following pages.

Although limited comments may follow a graph or chart, the detailed endnotes may be found in the *Reference Notes* listed on page 88. Explanatory footnotes are available on most pages and are intended to provide information pertaining to data sources, programs and limitations on data interpretation (e.g., across provider groups for CoCASA; Head Start reporting groups; etc.).

Where applicable, county-specific information is presented. Some service areas may have a particular type of information available to report, but that same type of information may not be available or applicable for reporting in another service area.

This year's report contains modified *Appendices* beginning on page 66, which includes updated reports pertaining to long-term care facility vaccinations and reportable diseases. Additional data and information pertaining to influenza and hepatitis B are also included in the *Appendices*. Information appearing in these sections varies from that reported in the body of the report (i.e., data from a limited geographic area, a subpopulation group, survey data, and disease trends). When reviewing the disease trends of reportable diseases, it is important to remember that reporting varies among the different service areas.

Demographic information is vital to understanding the current health and socioeconomic situations of Utah residents. Different factors, such as whether a family lives in a rural or urban area of the state, can have a significant impact on access to health care.

Demographic information is provided for each of Utah's health districts pertaining to the following categories:

Population, Poverty Rate, and Health Insurance Status

The changing nature of Utah's population requires state immunization staff, public health officials, providers, and other public health workers to be increasingly familiar with the state's shifting demographic situation.

The health of a family is often affected by socioeconomic factors. Poverty can be an indirect contributor to disease and illness, including delayed immunizations. A clear understanding of socioeconomic factors is necessary to identify, analyze, and move forward with appropriate targeted goals for immunizations across the lifespan.

Insurance status has a profound effect on access to adequate health care across the lifespan. The 2006-2007 Utah Health Status Survey³ showed that 11.3% of Utah residents (all ages) had no health insurance. Eligibility guidelines for families to qualify for Medicaid, Children's Health Insurance Program (CHIP), and Women, Infants and Children (WIC) assistance are based on federal poverty levels and age. Medicare eligibility is based on age.

The most current data available are included in this report. The year during which the data were taken for each demographic or socioeconomic factor does not always match across categories. *Population* data are from calendar year 2007. *Medicaid* data are from Fiscal Year 2007. *Poverty Rate* data come from a pooling of 2005-2006 calendar years and *Health Insurance Status* data come from a pooling of 2006-2007 calendar years.

The Advisory Committee on Immunization Practices (ACIP) at the Centers for Disease Control and Prevention (CDC) has established a standard of comparison for immunization status. Up-to-Date at Age-Two is the percentage of children age two years (24 months) who have received all doses of the recommended vaccines at the recommended age. This standard is used across the United States by state immunization programs and provider sites to evaluate their effectiveness in protecting patients from vaccine preventable diseases, as well as by schools and day care centers to measure the immunization status of their enrollees. Information is presented regarding the results of utilizing this standard in local health departments and private provider offices. Information is also presented regarding the geographic distribution and availability of health care providers where families might access primary health care including immunizations.

Comprehensive Clinic Assessment Software Application (CoCASA): Private Providers and LHDs

The vaccine series used as a standard is established by the ACIP. Currently, the immunization series for evaluation consists of 4 doses of Diphtheria, Tetanus, Pertussis (DTaP); 3 doses of Polio (IPV); 1 dose of Measles, Mumps, Rubella (MMR); 3 doses of Haemophilus Influenza Type b (Hib); 3 doses of Hepatitis B and 1 dose of Varicella vaccine. This series is typically written as **4:3:1:3:3:1**. The only place in this report where the old standard (4:3:1:3:3) will be referred to is on page 2, which indicates the statewide trends.

CoCASA is used to assess the immunization rates. Only Vaccine for Children (VFC) providers are assessed. While CoCASA assessment procedures are standardized, all private providers may not be evaluated on an annual basis. Clinics are selected for assessment based on compliance status and previous CoCASA rates. All LHDs are assessed annually.

The VFC program, administered by the CDC through the National Immunization Program (NIP), provides free vaccines to public and private providers serving eligible children.

LHDs may contain multiple counties within their service area. Some of these counties had very few patients and provided inadequate information for analysis. Consequently, coverage will be reported only by health district in this report.

Available Health Care Facilities and Personnel

The geographic distribution of health care providers (i.e., hospitals, community health center clinics, private providers) correlates strongly with families' ability to access and receive immunizations and primary health care in a medical home. Counts of VFC providers, public school nurses, public medical clinics, hospital long-term care facilities, and local health district offices are reported by LHD.

Specific coverage information relating to the CoCASA assessment is located on the *Early Childhood Immunization* pages. The first chart (three charts on the “State of Utah” page) on these pages illustrates the type of up-to-date (UTD) statuses which include: *UTD at age two*; *Late UTD*; *UTD one more visit*; and *Too late for UTD*. Information on missed opportunities to vaccinate is also presented graphically. These data are reported by public and private provider. The “State of Utah” page also includes one chart representing data from Federally Qualified Health Centers (FQHC), but most numbers for FQHC were too small to report at the LHD level. The second set of charts illustrates the number and type of USIIS providers and UTD status according to USIIS records.

Type of Immunization UTD Status

While it is true that Utah immunization *UTD at age two* rates are less than ideal, progress in a few basic areas may increase childhood immunization coverage. There is a large segment of the population that is *Late UTD* and an even larger population that can be brought *UTD with one more visit*. It is hoped that future targeted efforts toward children who can be brought *UTD with one more visit* can protect many more children, decreasing the number who are *Late UTD*, and improve our statewide immunization rates at age two. *Late UTD* indicates that the child was immunized at the time of the assessment, but was not *UTD at age two*. *Too Late for UTD* does not indicate that the child can’t receive immunizations, but that the child was not immunized by the assessment date and cannot be brought *UTD at age two*. These data come exclusively from CoCASA assessments and do not necessarily represent the entire population.

Utah Statewide Immunization Information System (USIIS)

USIIS records are vital to assist parents and medical providers in monitoring and ensuring their children and patients are UTD on all immunizations. These electronic records help track patients as they move geographically, change insurance, or change their medical home. Reporting UTD status according to USIIS records consolidates the reports from local health departments, community health clinics, and various private providers.

For this report, USIIS UTD status was organized by geographical area according to ZIP code and is reported by *Service Area*. UTD percentages are for 2005-2007 and correspond with the same time frame as the National Immunization Survey (NIS). The data set includes all children in the database with at least two electronic immunization records. Data limitations include the following factors: not all providers participate in USIIS, and it is possible that even among USIIS providers not all vaccinations are entered; patient records may be incomplete; and patients may receive vaccinations in several different counties over the course of their record. As of September 1, 2008, 61.5% of all Utah children under the age of 6 have at least two records in USIIS.

The 2008 Economic Report to the Governor indicates that, nationally, Utah has a larger percent of its total state population in the preschool age group than any other state.* In Utah, 9.7% of the total population is 0 through four years of age and 21.3% of the total population is five through 17 years of age.

Exposure to groups of people of any age increases the risk of infectious disease. More than two-thirds of children younger than 6 years and nearly all children older than 6 years spend significant time in child care and school settings outside of the home. The Utah Immunization Rule for Students (R396-100) went into effect in 1975 to implement consistent requirements to protect children attending school.

School Entry (Kindergarten & 7th Grade) & Second Dose MMR (K – 12)

Required Kindergarten Entry Immunizations are: DtaP, Polio, MMR, Hepatitis B, Hepatitis A, and Varicella. Beginning May 2007, children entering 7th grade must have: Hepatitis B, Varicella and Tdap. Children grades K-12 are required to have two doses of MMR vaccine.

Every November 30, by statute, all schools report student immunization information to the Utah Immunization Program. Conditional enrollment immunization information is also reported during the school year. By collaborative agreement with UDOH, school district immunization reports are provided to the Utah State Office of Education (USOE).

WIC, Child Care, and Head Start Enrollments/Coverage

Children attending daycare facilities, preschools, and school settings have increased chances for exposure to illness. Required early childhood immunizations as of November 30, 2007 were: DTaP, Polio, MMR, Hib, and Hepatitis B.

Child care facilities, preschools and Head Start programs report immunization information in the same manner as school districts to the Utah State Office of Education (USOE).

The 12 Utah Head Start (HS) programs serve children through federal grants for Head Start, Early Head Start, Migrant Head Start and American Indian Head Start. HS program areas do not correspond to LHD geographic *Service Areas*. Wasatch County HS data are reported in the Utah County Health District *Service Area*, and Morgan County HS data are reported in the Davis County Health District *Service Area*.

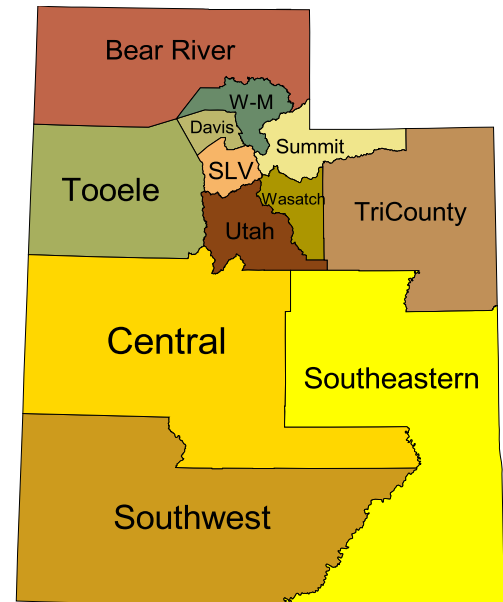
WIC clinics provide unique opportunities among high risk populations to educate families about recommended vaccines. Therefore, facility and enrollment figures are reported.

Influenza and Pneumococcal

The incidence of childhood vaccine-preventable diseases has declined dramatically, but similar success among adults has not been achieved. Adults suffer the vast majority of vaccine-preventable disease in the U.S. Vaccines remain underutilized, especially among persons at high risk for infection and disease complications, and among certain racial/ethnic populations.

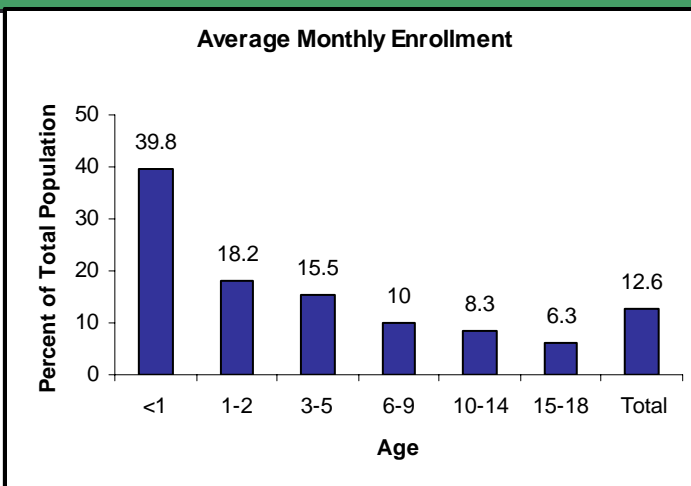
The 2007 Behavioral Risk Factor Surveillance System (BRFSS) survey results on influenza and pneumococcal immunization data have been included. Appendix C includes 2007 long term care and assisted living facility patient and employee immunization information.

| Population 2007 ¹ | Number | % of Total |
|--------------------------------|------------------|--------------|
| Total Population | 2,699,554 | |
| 17 and Under | 834,070 | 30.9% |
| 18 to 34 | 775,206 | 28.7% |
| 35 to 49 | 493,660 | 18.3% |
| 50 to 64 | 368,728 | 13.7% |
| 65 and Over | 227,890 | 8.4% |
| Poverty 2006-2007 ² | Number | % of Total |
| Total 0-100% Poverty | 242,900 | 9.1% |
| 17 and Under | 94,300 | 11.5% |
| 18 to 34 | 78,600 | 10.3% |
| 35 to 49 | 36,900 | 7.6% |
| 50 to 64 | 13,900 | 3.9% |
| 65 and Over | 12,600 | 5.6% |
| Total 101-200% Poverty | 611,200 | 23.0% |
| 17 and Under | 234,300 | 28.5% |
| 18 to 34 | 194,700 | 25.4% |
| 35 to 49 | 93,600 | 19.2% |
| 50 to 64 | 36,900 | 10.3% |
| 65 and Over | 47,400 | 21.2% |



| Population 2007 ¹ | Number | % of Total |
|------------------------------|----------------|------------|
| Total 0-18 | 879,155 | |
| <1 | 54,007 | 6.1% |
| 1-2 | 104,369 | 11.9% |
| 3-5 | 152,909 | 17.4% |
| 6-9 | 188,207 | 21.4% |
| 10-14 | 209,065 | 23.8% |
| 15-18 | 170,598 | 19.4% |

Medicaid Eligible Population by Age 2007⁵



Medicaid data were not yet available for Piute, Rich, or Wasatch Counties.

| Uninsured 2006-2007 ³ | Number | % of Total |
|--------------------------------------|----------------|--------------------|
| Total Uninsured (0-64) | 300,100 | 12.3% |
| 17 and Under | 80,000 | 9.7% |
| 18 to 34 | 141,900 | 18.5% |
| 35 to 49 | 55,000 | 11.3% |
| 50 to 64 | 23,200 | 6.5% |
| Selected Insurance Type ⁴ | Number | % of Total Insured |
| Medicare | 276,100 | 11.4% |
| CHIP* | 36,300 | 4.5% |

*Children's Health Insurance Program, Ages 0 to 18

State CoCasa: Up-to-Date at Age Two by Antigen 2007⁶

| | 4 DTaP | 3 Polio | 1 MMR | 3 Hib | 3 Hep B | 1 Varicella | 4:3:1:3:3:1 | 95% Confidence Interval |
|---------------|--------|---------|-------|-------|---------|-------------|-------------|-------------------------------|
| All Providers | 64.3% | 82.4% | 81.4% | 82.6% | 77.5% | 77.2% | 54.2% | 53.0%, 55.3% |

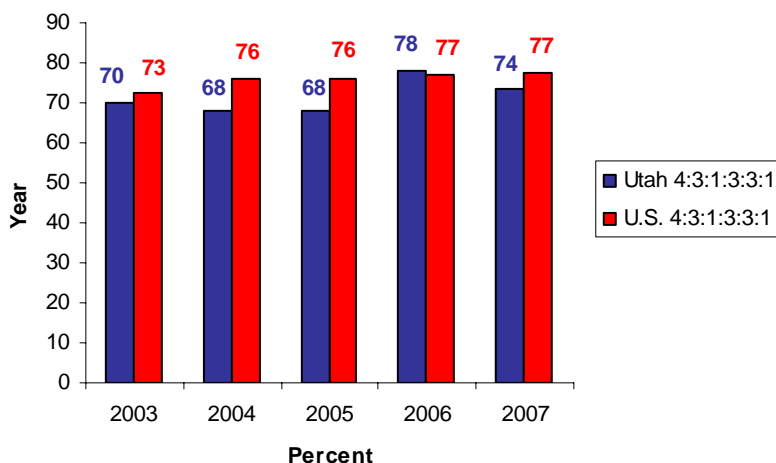
Up-to-Date at Age Two (4:3:1:3:3:1)⁶

| | 2007 | | 2006 |
|-------------------------|----------------|-------------------------|-------------------------|
| Provider Type | Point Estimate | 95% Confidence Interval | 95% Confidence Interval |
| Private VFC Providers | 50.4% | 49.1%, 51.8% | 44.7%, 48.0% |
| FQHC/RHC | 21.6% | 14.4%, 28.8% | 20.0%, 38.4% |
| Local Health Department | 68.0% | 65.7%, 70.2% | 67.5%, 71.0% |

Health Care 2007

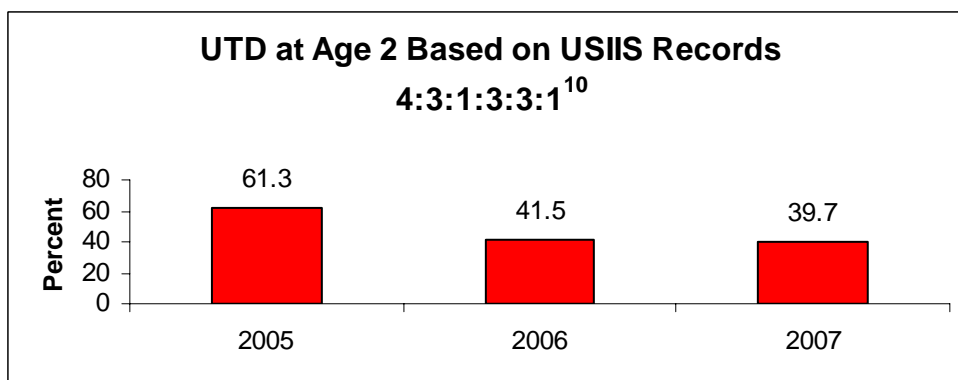
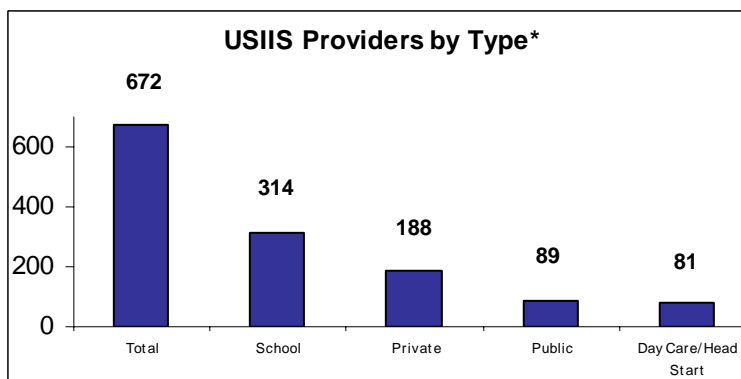
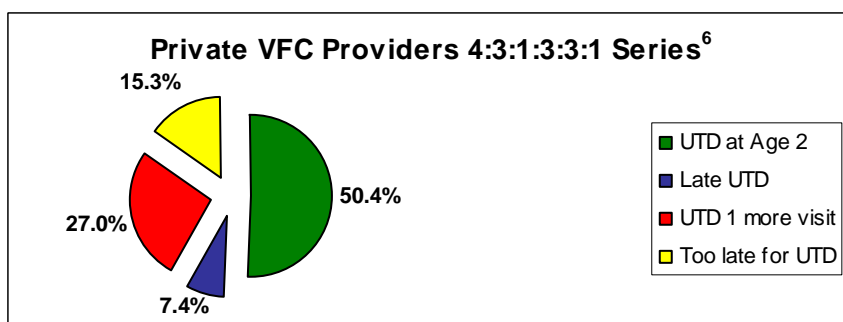
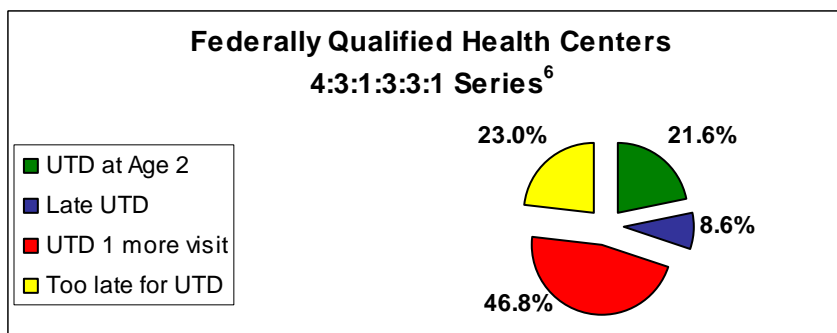
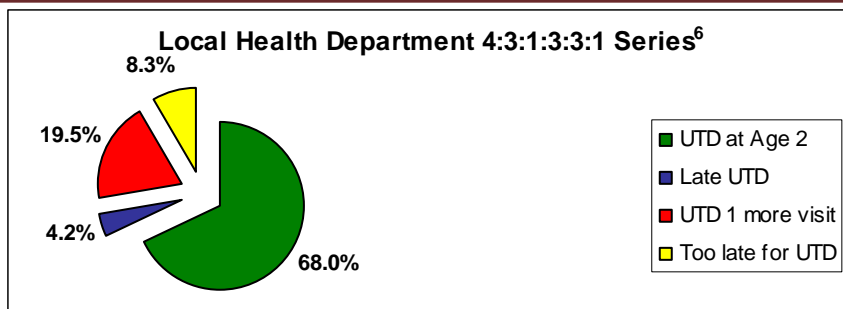
| Providers/Facilities | Number |
|---|--------|
| VFC Providers ⁶ | 317 |
| Public School Nurses (FTE) ¹⁴ | 103.5 |
| Charter School Nurses (FTE) ¹⁴ | 7.75 |
| Public Medical Clinics ⁶ | 59 |
| Hospitals ⁷ | 67 |
| Long-term Care and Assisted Living Centers ⁸ | 274 |
| Local Health District Offices ⁶ | 44 |

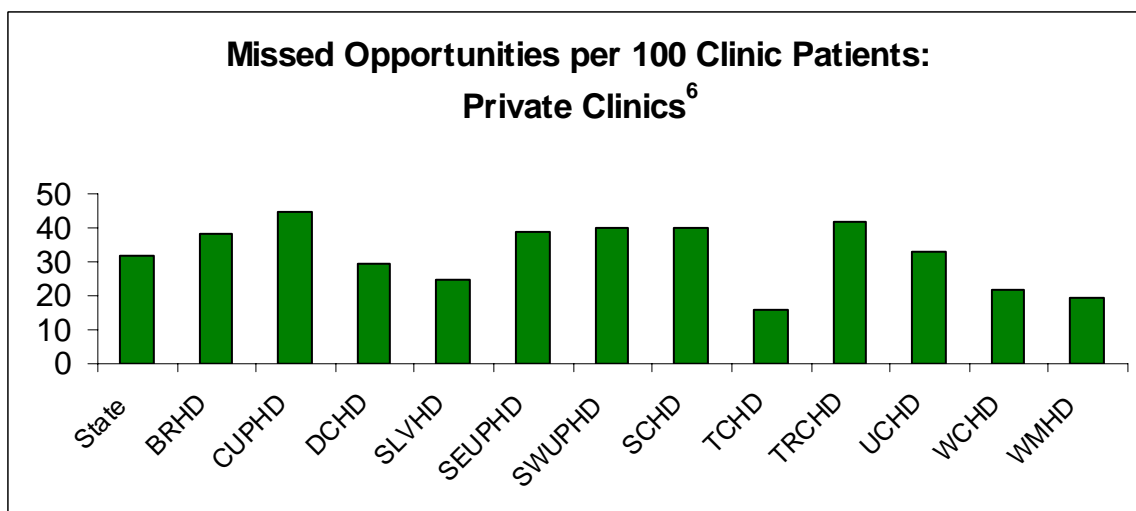
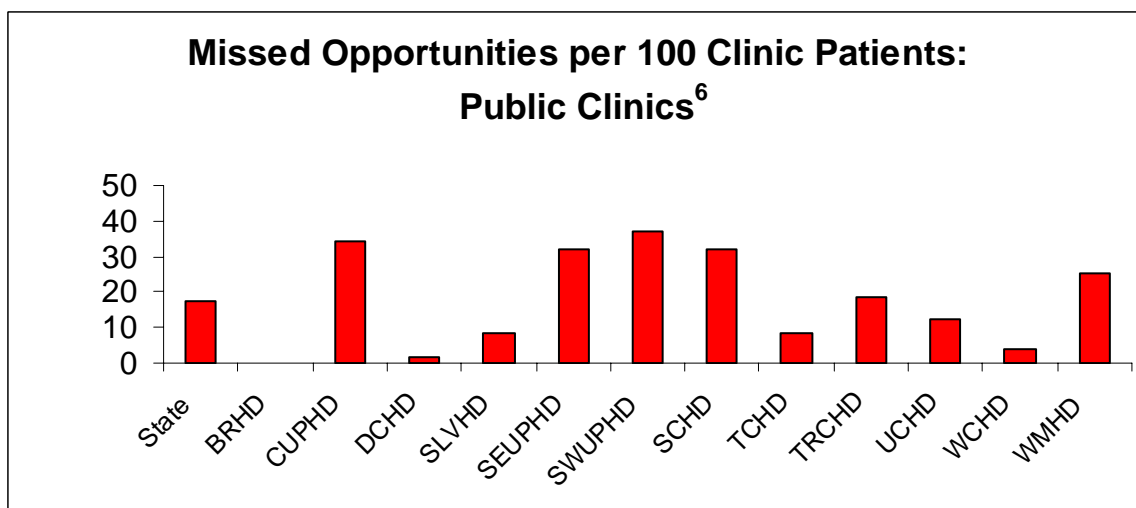
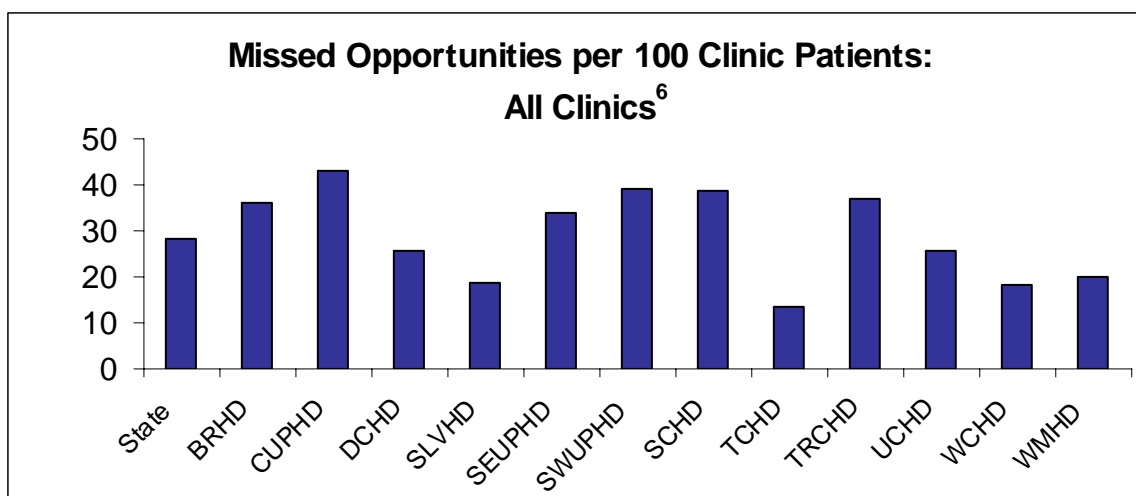
NIS⁹ Coverage Status 2003-2007 Utah and U.S.



Utah NIS Rank⁹

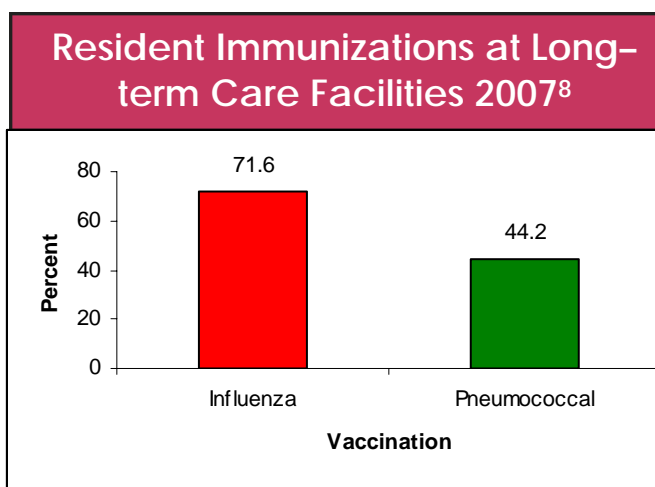
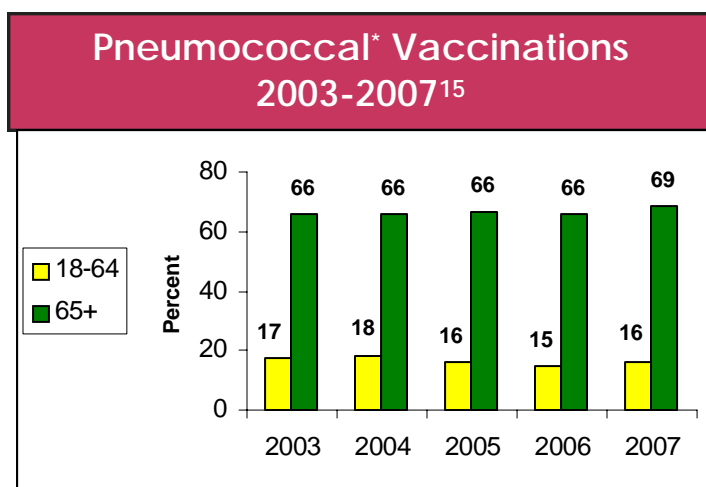
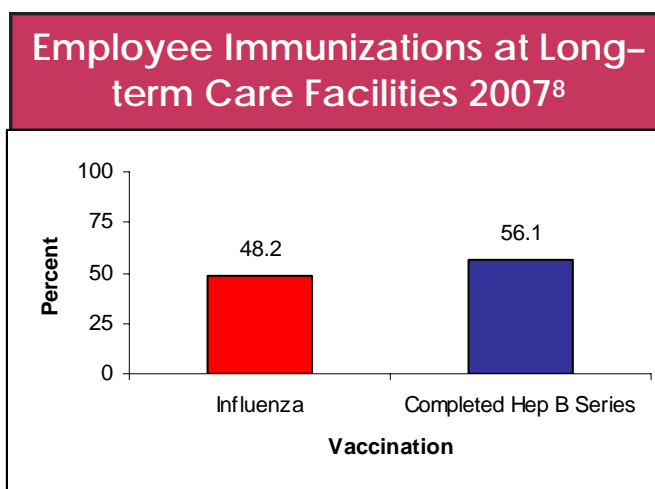
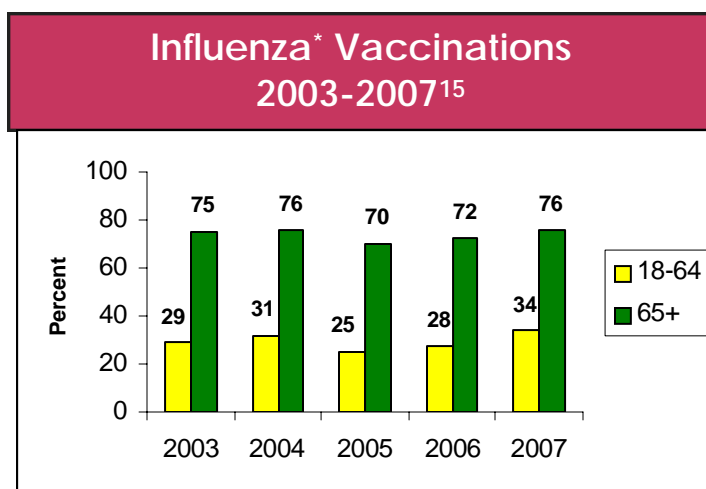
| Year | 4:3:1:3:3 | 4:3:1:3:3:1 |
|------|-----------|-------------|
| 2003 | 29th | 28th |
| 2004 | 49th | 43rd |
| 2005 | 47th | 41st |
| 2006 | 25th | 20th |
| 2007 | 37th | 39th |





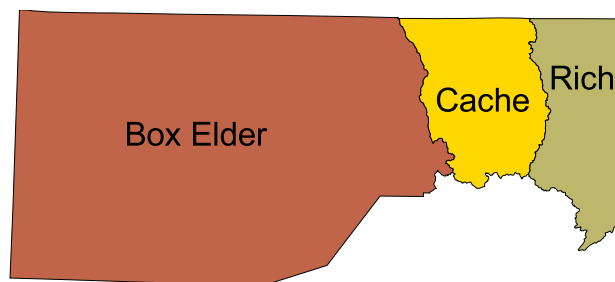
| Child & School Health 2007 | | |
|---------------------------------------|------------------------|------------|
| Child & School Health | Clinics/ Facilities | Enrollment |
| WIC Women ¹¹ | 49 | 17,384 |
| WIC Infants ¹¹ | 49 | 16,806 |
| WIC Children ¹¹ | 49 | 29,844 |
| Child Care ¹² | 404 | 28,857 |
| Head Start ¹³ | 181 | 6,581 |
| Public Schools ¹⁴ | 908 | 515,457 |
| Private/Charter Schools ¹⁴ | 178 | 39,106 |

| Immunized for School 2007 ⁶ | | |
|---|-------------------------|---------------------|
| | Adequately Immunized | Total Exemptions |
| Child Care Facilities and Preschools | 93.5% | 1.5% |
| Head Start Centers | 92.0% | 1.2% |
| Kindergarten School Entry | 83.9% | 2.9% |
| Second-Dose Measles (K-12) | 96.8% | 2.3% |
| 7th Grade Entry | 89.7% | 3.0% |



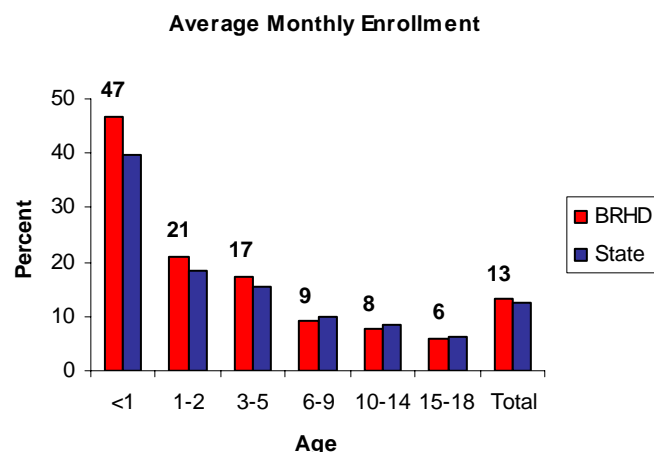
*Influenza=within past 12 months, pneumococcal=ever had

| Population 2007 ¹ | Number | % of Total |
|--------------------------------|----------------|--------------|
| Total Population | 158,675 | |
| 17 and Under | 50,820 | 32.0% |
| 18 to 34 | 52,099 | 32.8% |
| 35 to 49 | 24,588 | 15.5% |
| 50 to 64 | 18,595 | 11.7% |
| 65 and Over | 12,573 | 7.9% |
| Poverty 2006-2007 ² | Number | % of Total |
| Total 0-100% Poverty | 14,300 | 9.2% |
| 17 and Under | 4,400 | 8.8% |
| 18 to 34 | 6,800 | 13.3% |
| 35 to 49 | 2,300 | 9.3% |
| 50 to 64 | ** | ** |
| 65 and Over | ** | ** |
| Total 101-200% Poverty | 47,900 | 30.7% |
| 17 and Under | 20,900 | 41.7% |
| 18 to 34 | 15,700 | 30.5% |
| 35 to 49 | 6,600 | 27.0% |
| 50 to 64 | 1,500 | 8.5% |
| 65 and Over | 2,900 | 23.2% |



| Population 2007 ¹ | Number | % of Total |
|------------------------------|---------------|------------|
| Total 0-18 | 53,758 | |
| <1 | 3,328 | 6.2% |
| 1-2 | 6,766 | 12.6% |
| 3-5 | 9,667 | 18.0% |
| 6-9 | 11,536 | 21.5% |
| 10-14 | 12,212 | 22.7% |
| 15-18 | 10,249 | 19.1% |
| Population 2007 ¹ | Number | % of Total |
| Box Elder | 47,491 | 29.9% |
| Cache | 109,022 | 68.7% |
| Rich | 2,162 | 1.4% |

Medicaid Eligible Population by Age 2007⁵



Medicaid data for Rich County not yet available.

| Uninsured 2006-2007 ³ | Number | % of Total |
|--------------------------------------|---------------|--------------|
| Total Uninsured (0-64) | 20,300 | 14.1% |
| 17 and Under | 4,900 | 9.7% |
| 18 to 34 | 10,700 | 20.7% |
| 35 to 49 | 2,900 | 12.1% |
| 50 to 64 | 1,800 | 9.7% |
| Selected Insurance Type ⁴ | Number | % of Total |
| Medicare | 14,700 | 10.6% |
| CHIP* | ** | ** |

*Children's Health Insurance Program, Ages 0 to 18

CoCASA: Up-to-Date at Age Two by Antigen 2007⁶

| | 4 DTaP | 3 Polio | 1 MMR | 3 Hib | 3 Hep B | 1 Varicella | 4:3:1:3:3:1 | 95% Confidence Interval |
|---------------|--------|---------|-------|-------|---------|-------------|-------------|-------------------------------|
| All Providers | 60.7% | 81.3% | 81.9% | 80.9% | 73.0% | 79.3% | 51.0% | 47.0%, 55.0% |

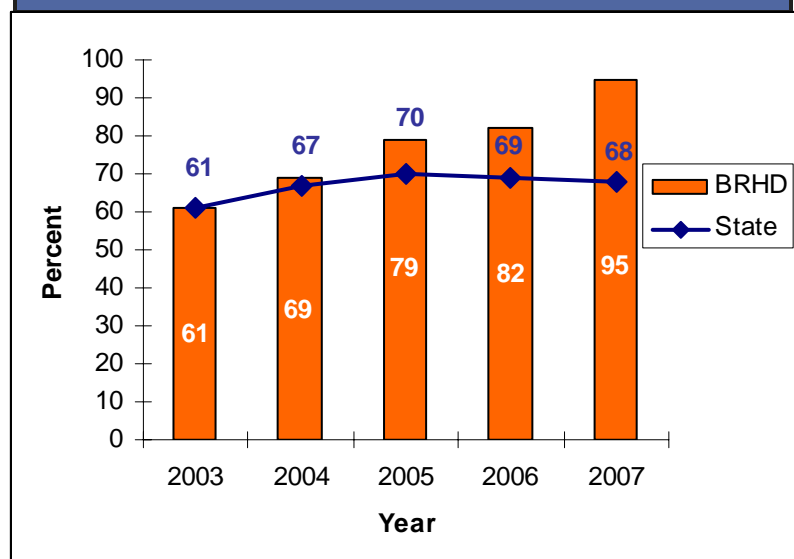
Up-to-Date at Age Two (4:3:1:3:3:1) 2007⁶

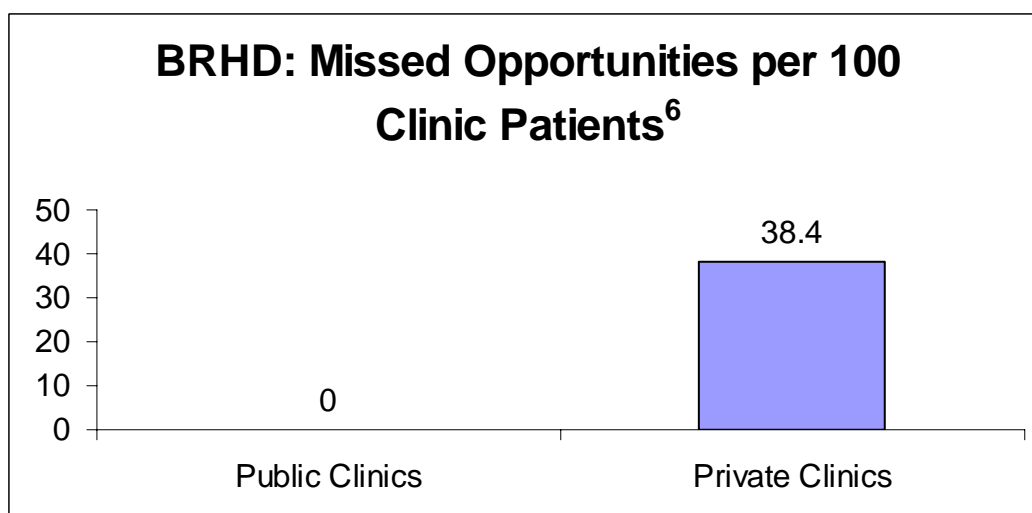
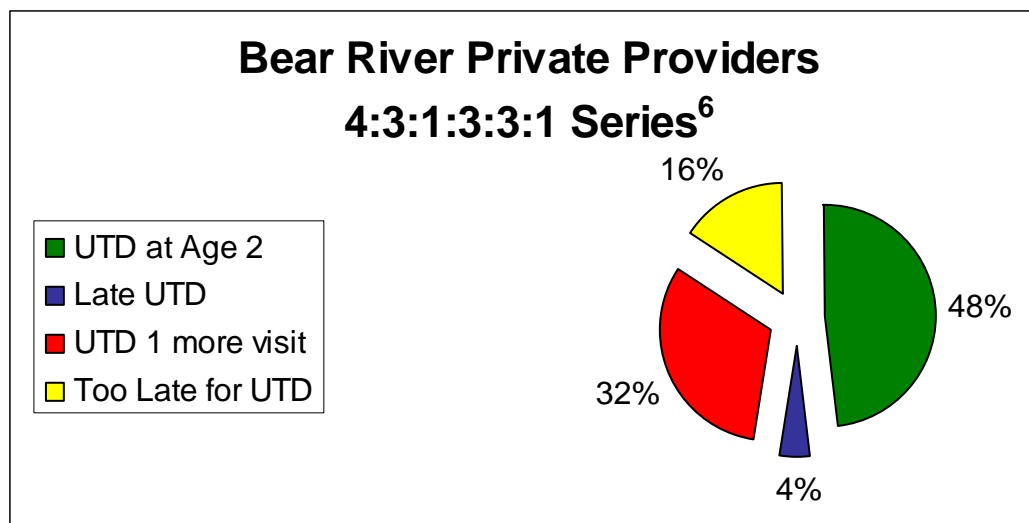
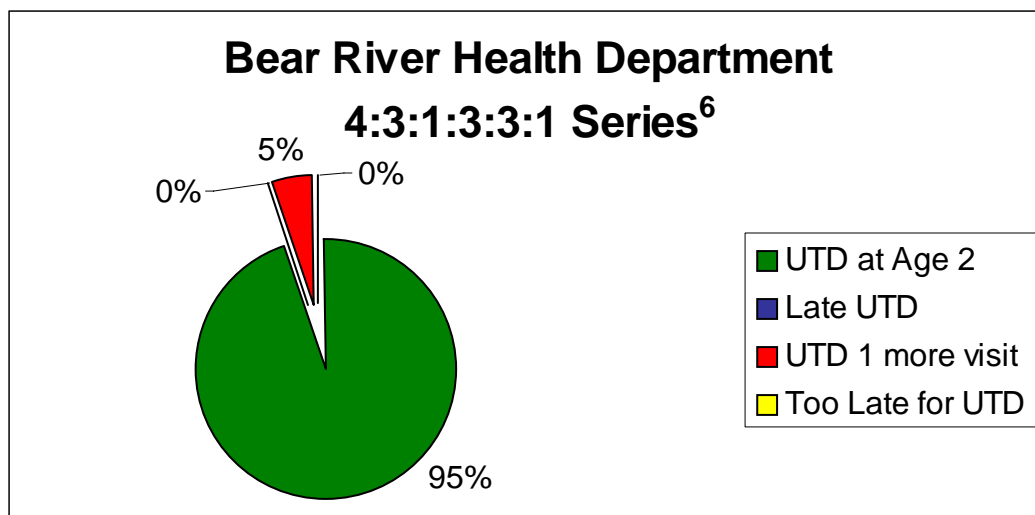
| | 2007 | | 2006 |
|---------------------------|----------------|-------------------------|-------------------------|
| Provider Type | Point Estimate | 95% Confidence Interval | 95% Confidence Interval |
| All VFC Private Providers | 48.0% | 43.8%, 52.2% | 42.7%, 53.3% |
| FQHC/RHC | NA | NA | NA |
| Local Health Departments | 94.9% | 83.1%, 98.6% | 77.3%, 93.7% |

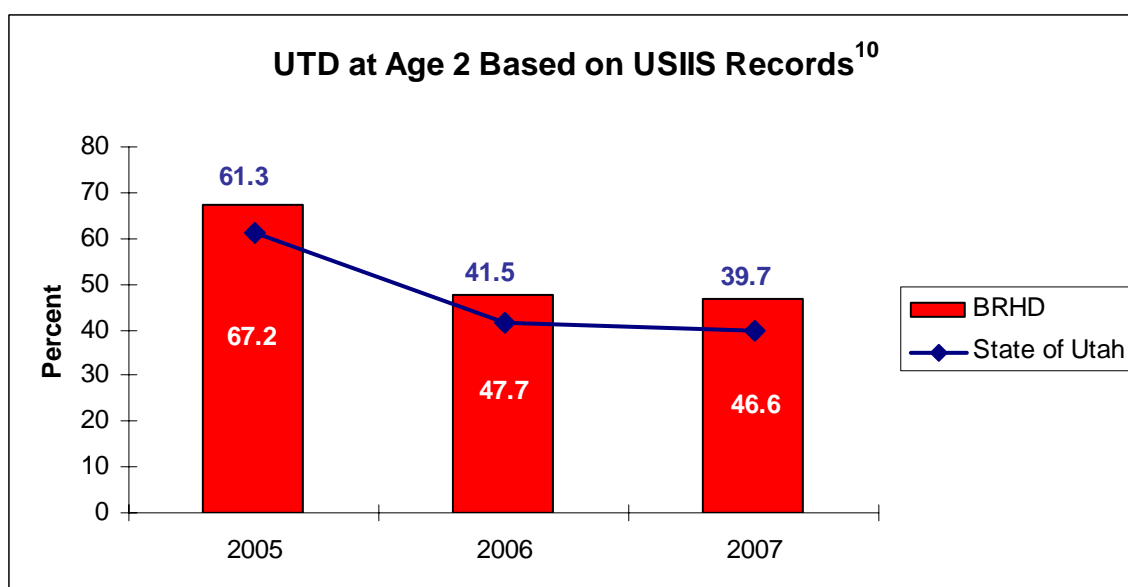
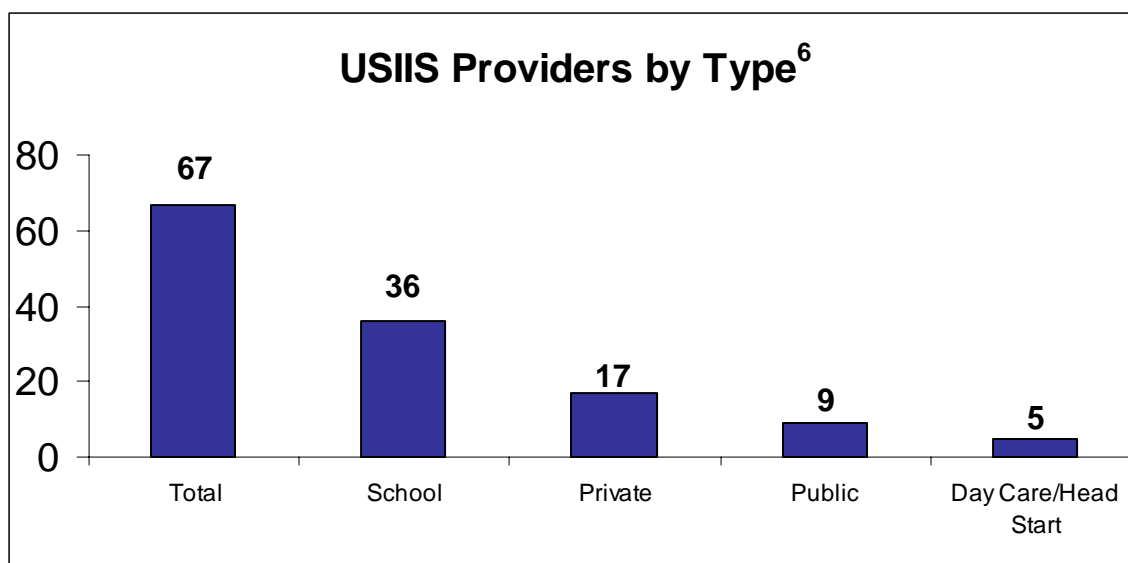
Health Care 2007

| Providers/Facilities | Number |
|---|--------|
| Private VFC Providers ⁶ | 16 |
| Public School Nurses (FTE) ¹⁴ | 4.16 |
| Charter School Nurses (FTE) ¹⁴ | 0 |
| Public Medical Clinics ⁶ | 5 |
| Hospitals ⁷ | 5 |
| Long-term Care and Assisted Living Centers ⁸ | 21 |
| Local Health District Offices ⁶ | 4 |

Bear River LHD CASA UTD at Age 2 4:3:1:3:3:1 2003-2007⁶







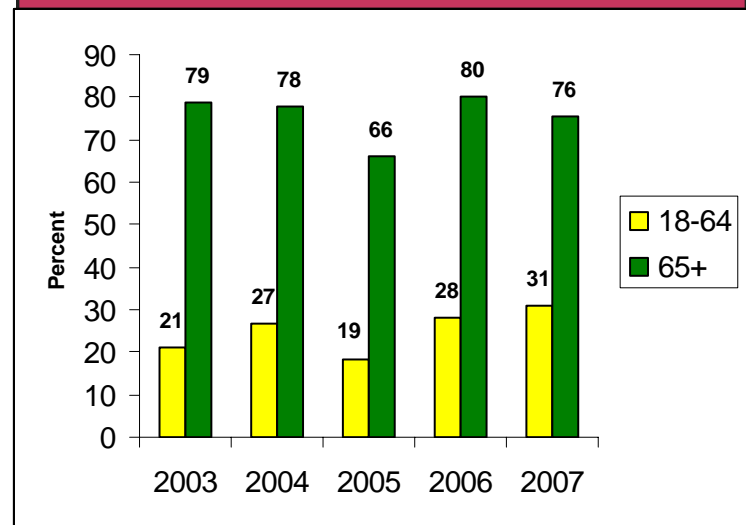
Adequately Immunized by School District 2007⁶

| | Box Elder | | Cache | | Logan City | | Rich | |
|----------------------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|
| Bear River | Adequate Immune | Total Exempt | Adequate Immune | Total Exempt | Adequate Immune | Total Exempt | Adequate Immune | Total Exempt |
| Kindergarten School Entry | 84.3% | 2.9% | 86.7% | 3.2% | 89.3% | 2.1% | 100% | 0% |
| Second-Dose Measles (K-12) | 98.1% | 1.9% | 97.4% | 1.6% | 95.2% | 1.6% | 98.9% | 1.1% |
| 7th Grade Entry | 96.7% | 3.0% | 96.4% | 1.7% | 89.8% | 2.9% | 100% | 0% |

Child & School Health 2007

| Child & School Health | Clinics/ Facilities | Enrollment |
|---------------------------------------|------------------------|------------|
| WIC Women ¹¹ | 4 | 1,244 |
| WIC Infants ¹¹ | 4 | 1,153 |
| WIC Children ¹¹ | 4 | 2,151 |
| Child Care ¹² | 11 | 705 |
| Head Start ¹³ | 14 | 421 |
| Public Schools ¹⁴ | 68 | 31,311 |
| Private/Charter Schools ¹⁴ | 8 | 1,678 |

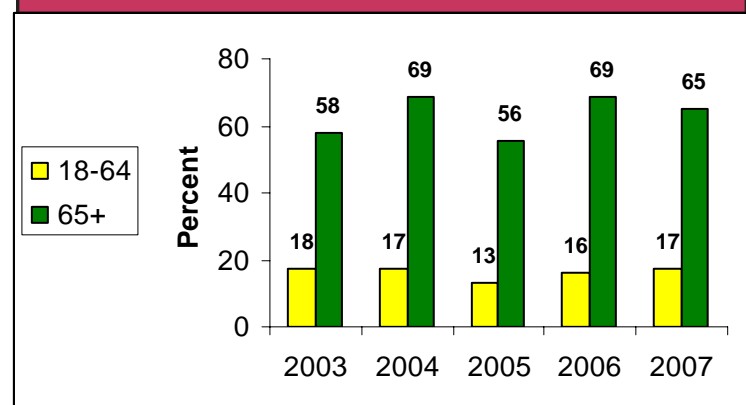
Influenza* Vaccination 2003-2007¹⁵



Immunized for Child Care 2007⁶

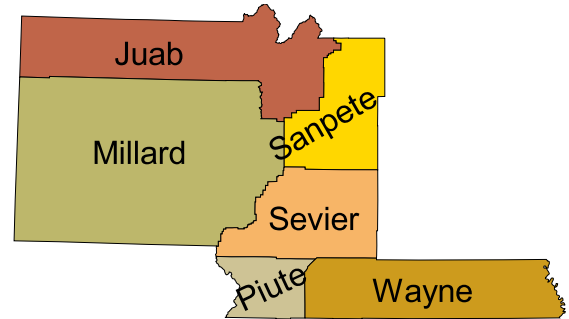
| Bear River | Adequately Immunized | Total Exemptions |
|--------------------------------------|----------------------|------------------|
| Child Care Facilities and Preschools | 97.2% | 2.0% |
| Head Start Centers | 98.8% | 1.0% |

Pneumococcal* Vaccinations 2003-2007¹⁵



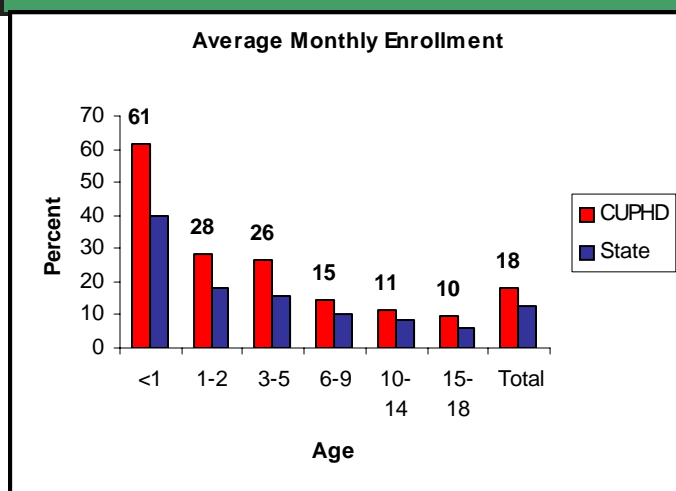
*Influenza=within past 12 months, pneumococcal=ever had

| Population 2007 ¹ | Number | % of Total |
|--------------------------------|---------------|--------------|
| Total Population | 73,994 | |
| 17 and Under | 21,998 | 29.7% |
| 18 to 34 | 20,762 | 28.1% |
| 35 to 49 | 12,000 | 16.2% |
| 50 to 64 | 10,811 | 14.6% |
| 65 and Over | 8,423 | 11.4% |
| Poverty 2006-2007 ² | Number | % of Total |
| Total 0-100% Poverty | 13,800 | 18.8% |
| 17 and Under | 5,400 | 24.6% |
| 18 to 34 | 4,300 | 21.4% |
| 35 to 49 | 1,800 | 15.4% |
| 50 to 64 | 900 | 8.6% |
| 65 and Over | 1,100 | 13.0% |
| Total 101-200% Poverty | 21,900 | 29.9% |
| 17 and Under | 7,600 | 34.9% |
| 18 to 34 | 6,800 | 33.3% |
| 35 to 49 | 3,200 | 26.7% |
| 50 to 64 | 1,300 | 12.0% |
| 65 and Over | 3,000 | 35.5% |



| Population 2007 ¹ | Number | % of Total |
|------------------------------|---------------|------------|
| Total 0-18 | 23,580 | |
| <1 | 1,174 | 5.0% |
| 1-2 | 2,404 | 10.2% |
| 3-5 | 3,524 | 14.9% |
| 6-9 | 4,810 | 20.4% |
| 10-14 | 6,129 | 26.0% |
| 15-18 | 5,539 | 23.5% |
| Population 2007 ¹ | Number | % of Total |
| Juab | 9,654 | 13.0% |
| Millard | 13,414 | 18.1% |
| Piute | 1,385 | 1.9% |
| Sanpete | 26,464 | 35.8% |
| Sevier | 20,442 | 27.6% |
| Wayne | 2,635 | 3.6% |

Medicaid Eligible Population by Age 2007⁵



Medicaid data for Piute County not yet available.

| Uninsured 2006-2007 ³ | Number | % of Total |
|--------------------------------------|--------------|--------------|
| Total Uninsured (0-64) | 9,400 | 14.5% |
| 17 and Under | 1,300 | 5.9% |
| 18 to 34 | 4,600 | 22.6% |
| 35 to 49 | 2,600 | 22.2% |
| 50 to 64 | 900 | 8.8% |
| Selected Insurance Type ⁴ | Number | % of Total |
| Medicare | 9,400 | 15.1% |
| CHIP* | 2,700 | 13.0% |

*Children's Health Insurance Program, Ages 0 to 18

CoCASA: Up-to-Date at Age Two by Antigen 2007⁶

| | 4 DTaP | 3 Polio | 1 MMR | 3 Hib | 3 Hep B | 1 Varicella | 4:3:1:3:3:1 | 95% Confidence Interval |
|---------------|--------|---------|-------|-------|---------|-------------|-------------|-------------------------------|
| All Providers | 50.3% | 77.7% | 73.7% | 78.9% | 73.1% | 61.1% | 33.7% | 29.3%, 38.1% |

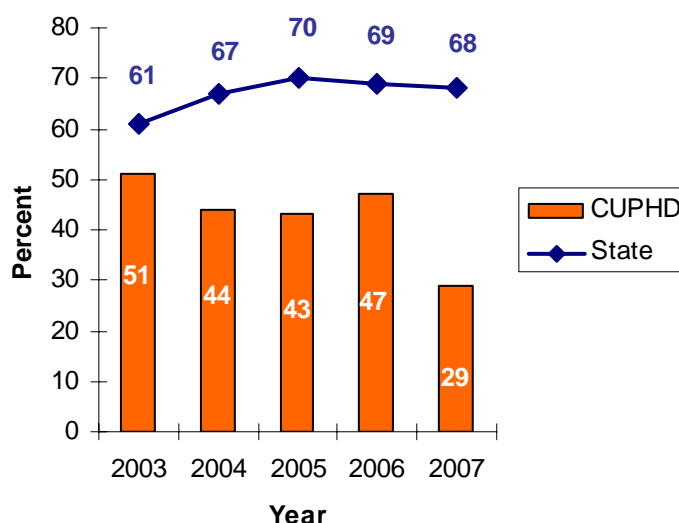
Up-to-Date at Age Two (4:3:1:3:3:1) 2007⁶

| | 2007 | | 2006 |
|---------------------------|----------------|-------------------------|-------------------------|
| Provider Type | Point Estimate | 95% Confidence Interval | 95% Confidence Interval |
| All VFC Private Providers | 34.6% | 29.9%, 39.4% | 35.5%, 48.3% |
| FQHC/RHC | NA | NA | NA |
| Local Health Departments | 28.6% | 17.3%, 39.9% | 37.7%, 57.0% |

Health Care 2007

| Providers/Facilities | Number |
|---|--------|
| Private VFC Providers ⁶ | 14 |
| Public School Nurses (FTE) ¹⁴ | 3.87 |
| Charter School Nurses (FTE) ¹⁴ | 0 |
| Public Medical Clinics ⁶ | 2 |
| Hospitals ^{7,*} | 7 |
| Long-term Care and Assisted Living Centers ⁸ | 15 |
| Local Health District Offices ⁶ | 8 |

Central LHD CASA UTD at Age 2 4:3:1:3:3:1 2003-2007⁶

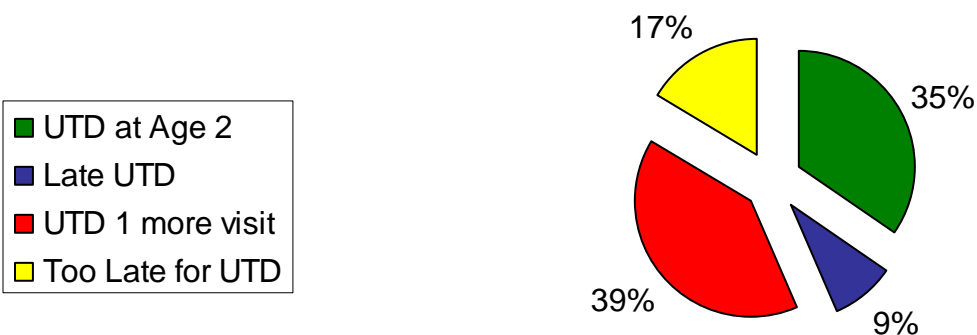


*Central Valley Medical Center & Gunnison Hospital NOT offering birth dose Hepatitis B vaccine.

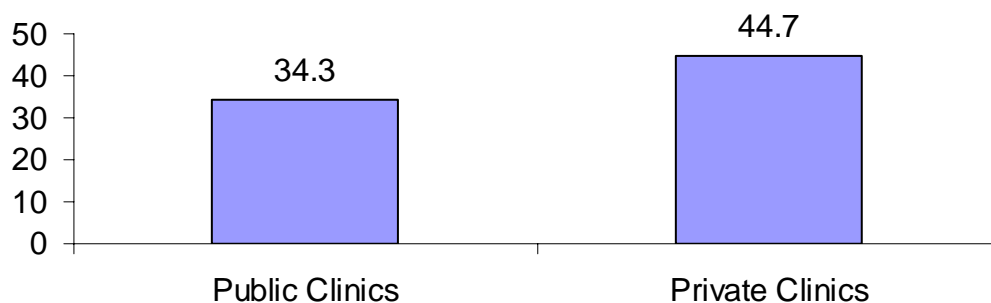
**Central Utah Public Health Department
4:3:1:3:3:1 Series⁶**

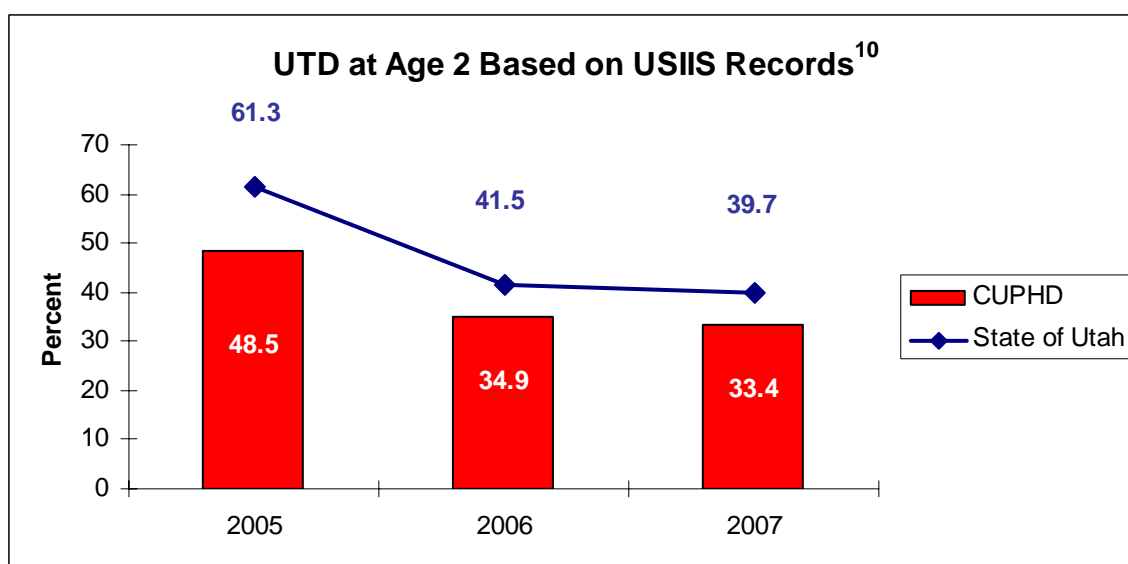
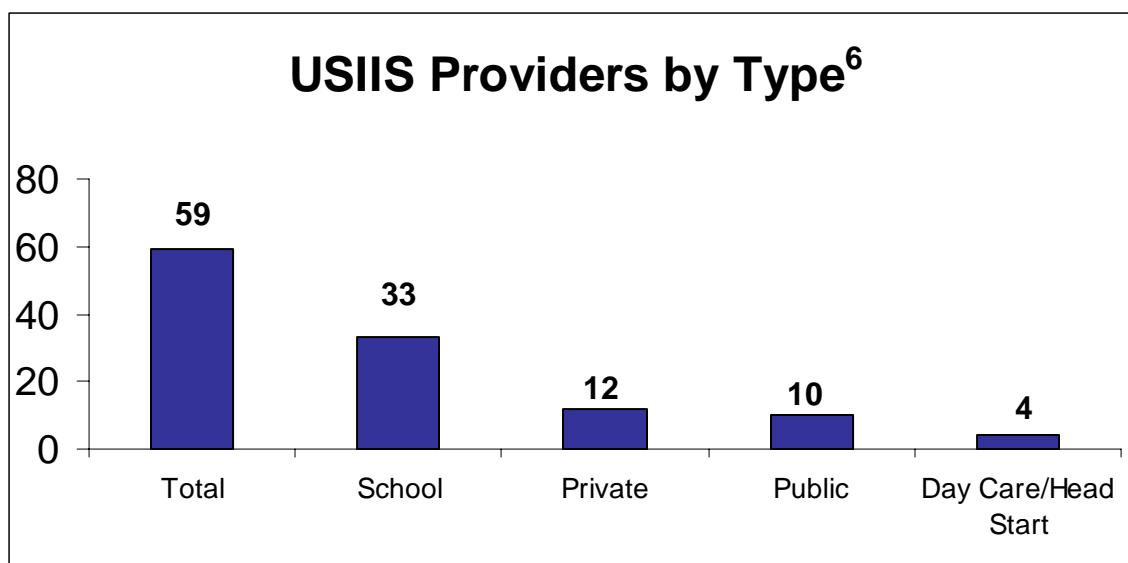


**Central Utah Private Providers
4:3:1:3:3:1 Series⁶**



**CUPHD: Missed Opportunities per 100
Clinic Patients⁶**





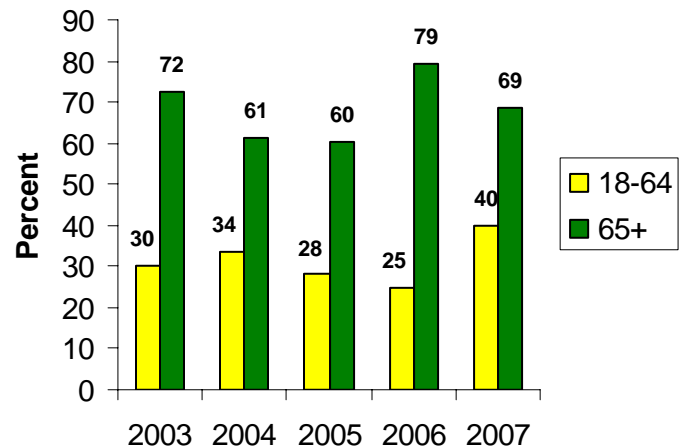
Adequately Immunized by School District 2007⁶

| | Juab | | Millard | | N Sanpete | | Piute | | Sevier | | S Sanpete | | Tintic | | Wayne | |
|----------------------------|----------|------------|----------|------------|-----------|------------|----------|------------|----------|------------|-----------|------------|----------|------------|----------|------------|
| Central | Adeq Imm | Total Exmp | Adeq Imm | Total Exmp | Adeq Imm | Total Exmp | Adeq Imm | Total Exmp | Adeq Imm | Total Exmp | Adeq Imm | Total Exmp | Adeq Imm | Total Exmp | Adeq Imm | Total Exmp |
| Kindergarten School Entry | 81.5% | 7.1% | 89.9% | 4.2% | 72.3% | 6.2% | 80.0% | 5.0% | 77.2% | 8.1% | 83.8% | 3.5% | 93.3% | 6.7% | 95.0% | 5.0% |
| Second-Dose Measles (K-12) | 94.3% | 5.7% | 97.2% | 2.8% | 94.0% | 4.6% | 98.8% | 1.2% | 94.4% | 5.6% | 95.7% | 3.6% | 97.0% | 3.0% | 98.9% | 1.1% |
| 7th Grade Entry | 90.9% | 6.7% | 94.3% | 5.2% | 95.0% | 3.3% | 100% | 0% | 94.0% | 5.4% | 91.8% | 7.7% | 100% | 0% | 91.9% | 8.1% |

Child & School Health 2007

| Group | Clinics/ Facilities | Enrollment |
|---------------------------------------|------------------------|------------|
| WIC Women ¹¹ | 10 | 523 |
| WIC Infants ¹¹ | 10 | 502 |
| WIC Children ¹¹ | 10 | 1,114 |
| Child Care ¹² | 18 | 736 |
| Head Start ¹³ | 7 | 193 |
| Public Schools ¹⁴ | 62 | 15,811 |
| Private/Charter Schools ¹⁴ | 9 | 861 |

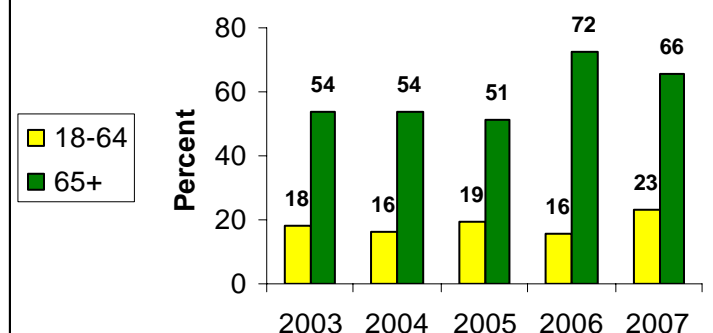
Influenza* Vaccinations 2003-2007¹⁵



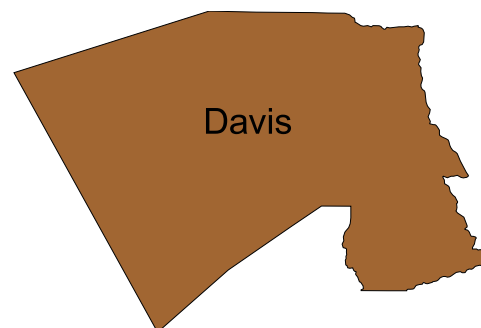
Immunized for Child Care 2007⁶

| Central | Adequately Immunized | Total Exemptions |
|--------------------------------------|----------------------|------------------|
| Child Care Facilities and Preschools | 93.8% | 3.0% |
| Head Start Centers | 86.5% | 3.1% |

Pneumococcal* Vaccinations 2003-2007¹⁵

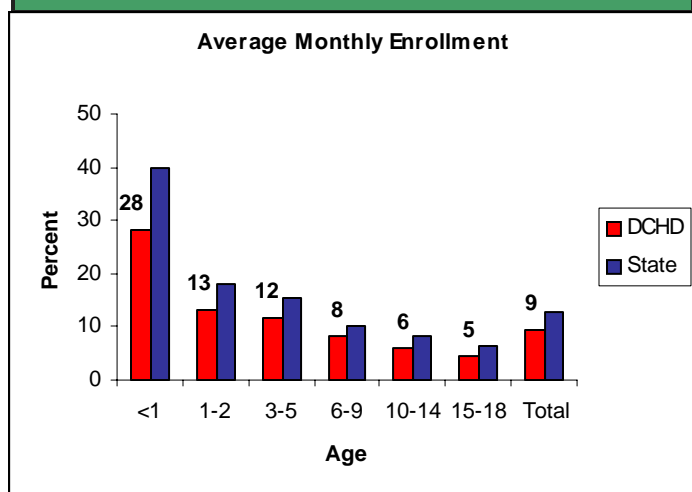


| Population 2007 ¹ | Number | % of Total |
|--------------------------------|----------------|--------------|
| Total Population | 296,029 | |
| 17 and Under | 94,539 | 31.9% |
| 18 to 34 | 81,585 | 27.6% |
| 35 to 49 | 56,677 | 19.1% |
| 50 to 64 | 41,267 | 13.9% |
| 65 and Over | 21,961 | 7.4% |
| Poverty 2006-2007 ² | Number | % of Total |
| Total 0-100% Poverty | 14,900 | 5.1% |
| 17 and Under | 5,400 | 5.8% |
| 18 to 34 | 5,200 | 6.5% |
| 35 to 49 | 2,100 | 3.7% |
| 50 to 64 | ** | ** |
| 65 and Over | ** | ** |
| Total 101-200% Poverty | 57,600 | 19.8% |
| 17 and Under | 26,000 | 27.9% |
| 18 to 34 | 17,700 | 22.1% |
| 35 to 49 | 8,000 | 14.3% |
| 50 to 64 | 2,700 | 6.7% |
| 65 and Over | 3,100 | 14.4% |



| Population 2007 ¹ | Number | % of Total |
|------------------------------|---------------|------------|
| Total 0-18 | 99,276 | |
| <1 | 6,051 | 6.1% |
| 1-2 | 11,651 | 11.7% |
| 3-5 | 16,599 | 16.7% |
| 6-9 | 20,595 | 20.7% |
| 10-14 | 24,563 | 24.7% |
| 15-18 | 19,817 | 20.0% |

Medicaid Eligible Population by Age 2007⁵



| Uninsured 2006-2007 ³ | Number | % of Total |
|--------------------------------------|---------------|-------------|
| Total Uninsured (0-64) | 25,000 | 9.3% |
| 17 and Under | 6,600 | 7.1% |
| 18 to 34 | 10,800 | 13.5% |
| 35 to 49 | 4,900 | 8.8% |
| 50 to 64 | 2,700 | 6.8% |
| Selected Insurance Type ⁴ | Number | % of Total |
| Medicare | 25,400 | 9.6% |
| CHIP* | 2,800 | 3.0% |

*Children's Health Insurance Program, Ages 0 to 18

CoCASA: Up-to-Date at Age Two by Antigen 2007⁶

| | 4 DTaP | 3 Polio | 1 MMR | 3 Hib | 3 Hep B | 1 Varicella | 4:3:1:3:3:1 | 95% Confidence Interval |
|---------------|--------|---------|-------|-------|---------|-------------|-------------|-------------------------------|
| All Providers | 65.3% | 86.1% | 83.3% | 87.9% | 79.2% | 81.5% | 54.8% | 50.4%, 59.3% |

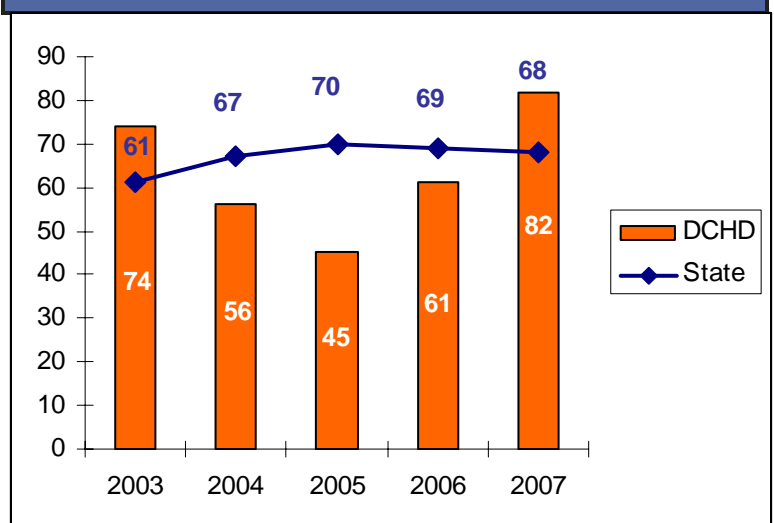
Up-to-Date at Age Two (4:3:1:3:3:1) 2007⁶

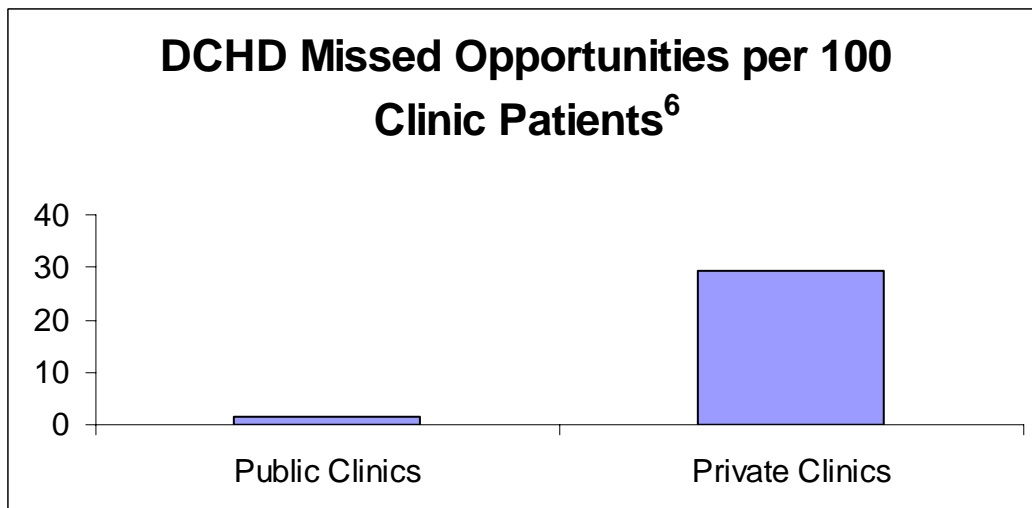
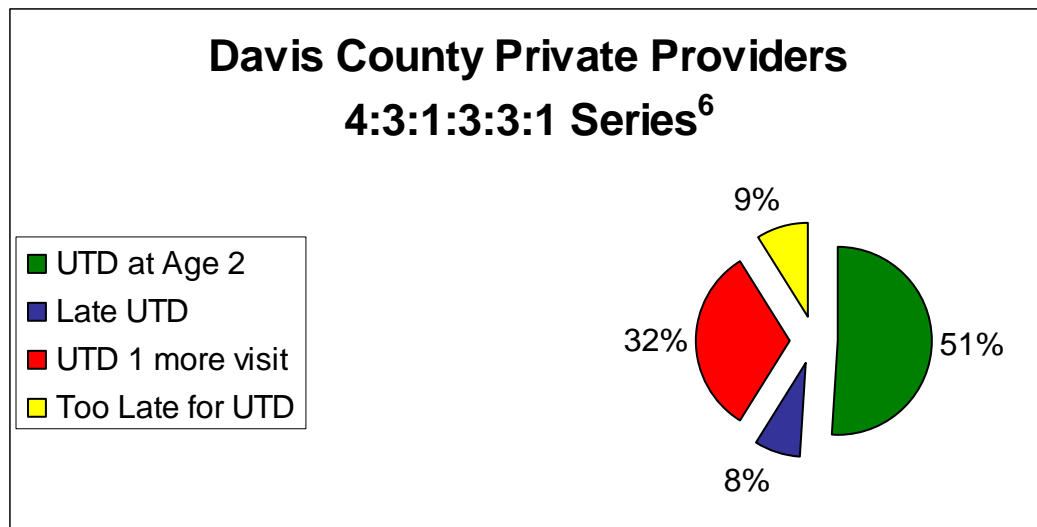
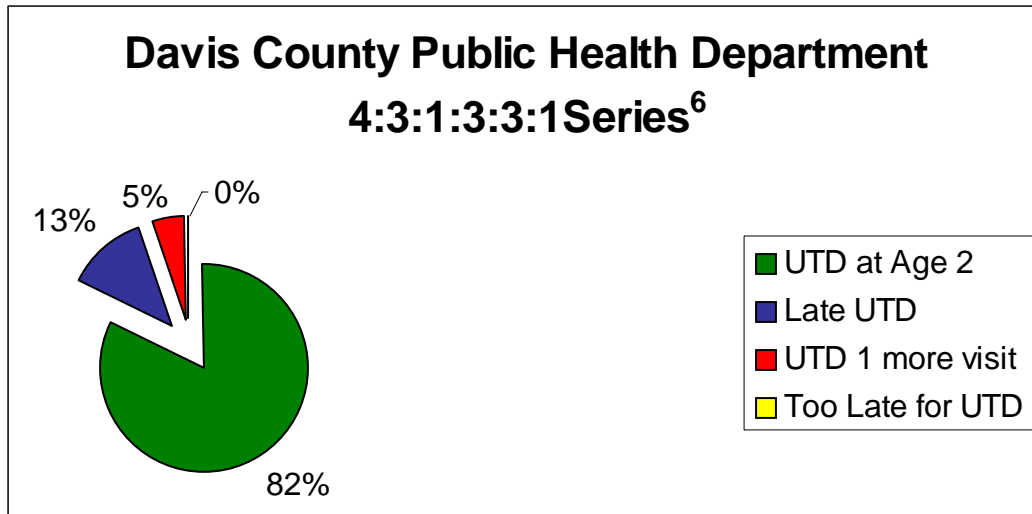
| | 2007 | | 2006 |
|---------------------------|----------------|-------------------------|-------------------------|
| Provider Type | Point Estimate | 95% Confidence Interval | 95% Confidence Interval |
| All VFC Private Providers | 51.0% | 46.2%, 55.8% | 45.4%, 60.0% |
| FQHC/RHC | NA | NA | NA |
| Local Health Departments | 82.0% | 71.5%, 92.5% | 52.4%, 70.0% |

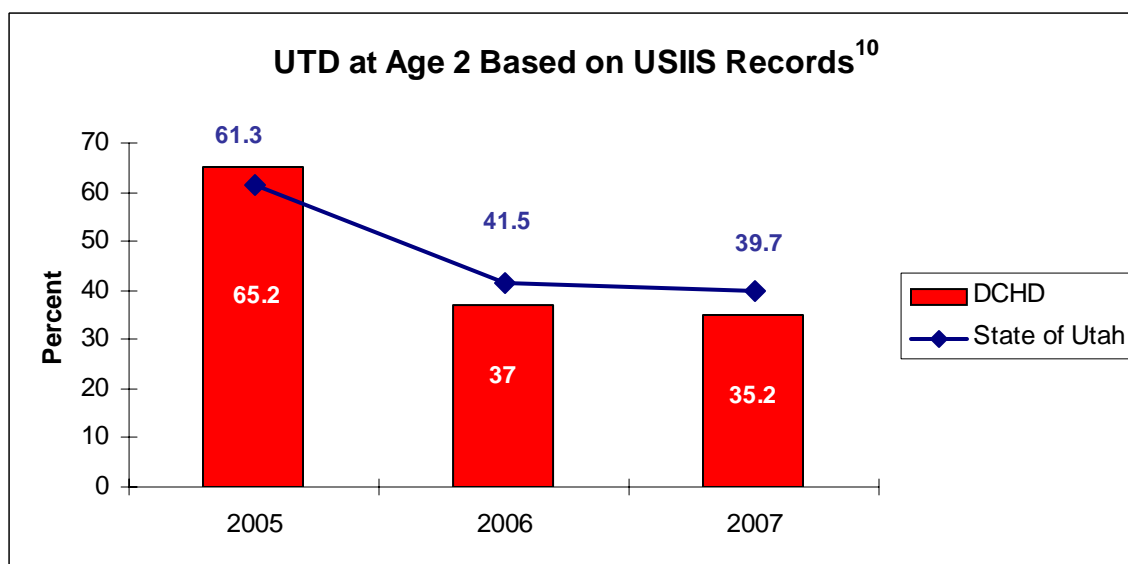
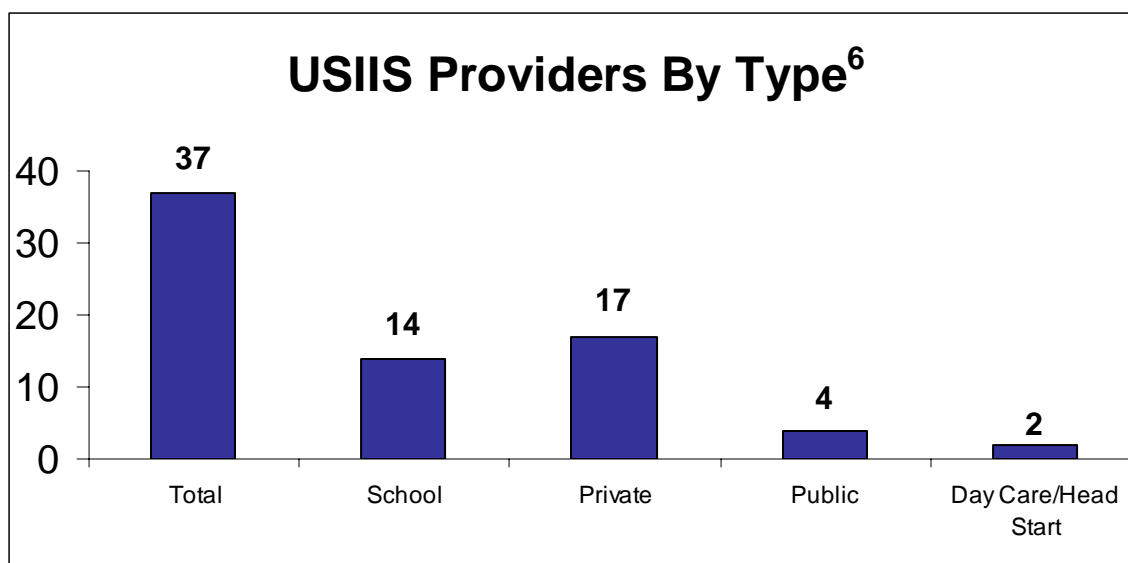
Health Care 2007

| Providers/Facilities | Number |
|---|--------|
| Private VFC Providers ⁶ | 23 |
| Public School Nurses | 11.8 |
| Charter School Nurses | 0.6 |
| Public Medical Clinics ⁶ | 2 |
| Hospitals ⁷ | 5 |
| Long-term Care and Assisted Living Centers ⁸ | 26 |
| Local Health District Offices ⁶ | 2 |

**Davis County LHD CASA UTD at Age 2
4:3:1:3:3:1 2003-2007⁶**







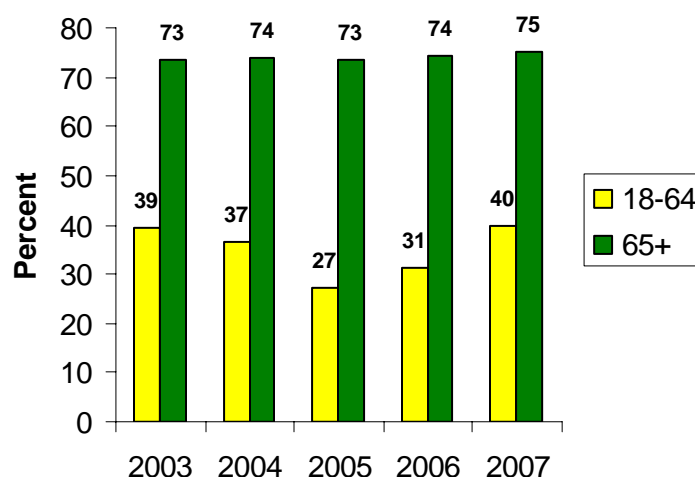
Adequately Immunized by School District 2007⁶

| Davis | Davis School District | |
|----------------------------|-----------------------|------------------|
| | Adequately Immunized | Total Exemptions |
| Kindergarten School Entry | 79.9% | 2.3% |
| Second-Dose Measles (K-12) | 96.9% | 1.9% |
| 7th Grade Entry | 80.3% | 2.3% |

Child & School Health 2007

| Group | Clinics/ Facilities | Enrollment |
|---------------------------------------|------------------------|------------|
| WIC Women ¹¹ | 2 | 1,295 |
| WIC Infants ¹¹ | 2 | 1,364 |
| WIC Children ¹¹ | 2 | 2,368 |
| Child Care ¹² | 20 | 1,299 |
| Head Start ^{+, 13} | 33 | 1,546 |
| Public Schools ¹⁴ | 99 | 64,551 |
| Private/Charter Schools ¹⁴ | 14 | 3,459 |

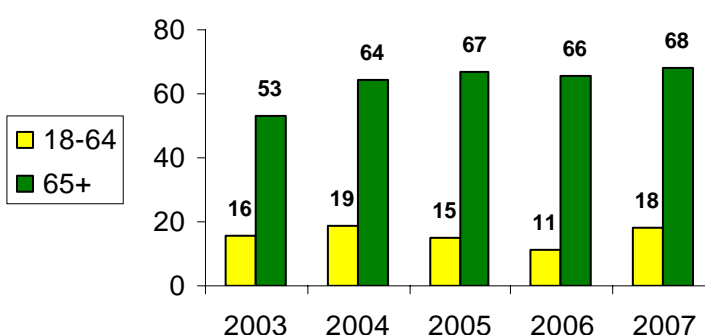
Influenza* Vaccinations 2003-2007¹⁵



Immunized for Child Care 2007⁶

| Davis | Adequately Immunized | Total Exemptions |
|--------------------------------------|----------------------|------------------|
| Child Care Facilities and Preschools | 93.3% | 0.9% |
| Head Start Centers ⁺ | 91.1% | 1.5% |

Pneumococcal* Vaccinations 2003-2007¹⁵



⁺ Head Start data for Morgan County is included with DCHD.

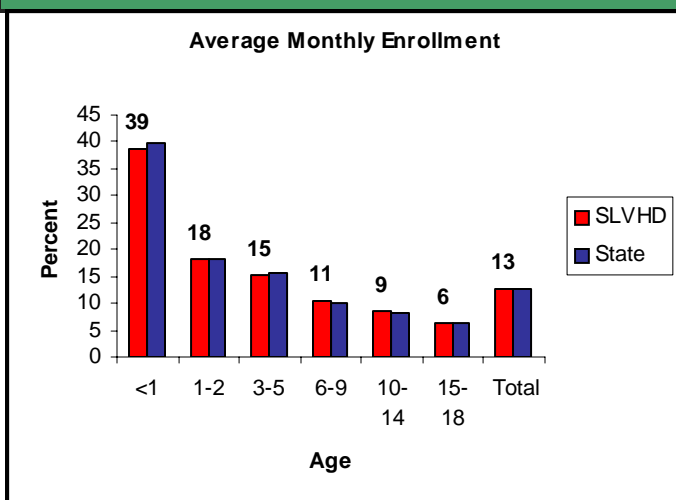
*Influenza=within past 12 months, pneumococcal=ever had

| Population 2007 ¹ | Number | % of Total |
|--------------------------------|------------------|--------------|
| Total Population | 1,018,904 | |
| 17 and Under | 304,198 | 29.9% |
| 18 to 34 | 274,602 | 27.0% |
| 35 to 49 | 206,506 | 20.3% |
| 50 to 64 | 149,890 | 14.7% |
| 65 and Over | 83,708 | 8.2% |
| Poverty 2006-2007 ² | Number | % of Total |
| Total 0-100% Poverty | 87,300 | 8.7% |
| 17 and Under | 34,600 | 11.5% |
| 18 to 34 | 25,100 | 9.2% |
| 35 to 49 | 14,900 | 7.3% |
| 50 to 64 | 5,200 | 3.5% |
| 65 and Over | 3,700 | 4.5% |
| Total 101-200% Poverty | 194,900 | 19.3% |
| 17 and Under | 75,100 | 25.0% |
| 18 to 34 | 56,400 | 20.6% |
| 35 to 49 | 33,500 | 16.4% |
| 50 to 64 | 12,400 | 8.4% |
| 65 and Over | 16,100 | 19.6% |



| Population 2007 ¹ | Number | % of Total |
|------------------------------|----------------|------------|
| Total 0-18 | 319,261 | |
| <1 | 19,374 | 6.1% |
| 1-2 | 37,237 | 11.7% |
| 3-5 | 55,696 | 17.4% |
| 6-9 | 69,194 | 21.7% |
| 10-14 | 77,240 | 24.2% |
| 15-18 | 60,520 | 19.0% |

Medicaid Eligible Population by Age 2007⁵



| Uninsured 2006-2007 ³ | Number | % of Total |
|--------------------------------------|----------------|--------------|
| Total Uninsured (0-64) | 102,600 | 11.1% |
| 17 and Under | 27,400 | 9.1% |
| 18 to 34 | 47,500 | 17.4% |
| 35 to 49 | 19,100 | 9.4% |
| 50 to 64 | 8,600 | 5.9% |
| Selected Insurance Type ⁴ | Number | % of Total |
| Medicare | 102,100 | 10.9% |
| CHIP* | 14,800 | 5.0% |

*Children's Health Insurance Program, Ages 0 to 18

CoCASA: Up-to-Date at Age Two by Antigen 2007⁶

| | 4 DTaP | 3 Polio | 1 MMR | 3 Hib | 3 Hep B | 1 Varicella | 4:3:1:3:3:1 | 95% Confidence Interval |
|---------------|--------|---------|-------|-------|---------|-------------|-------------|-------------------------------|
| All Providers | 75.1% | 89.2% | 88.8% | 90.0% | 85.8% | 85.4% | 66.5% | 64.3%, 68.7% |

Up-to-Date at Age Two (4:3:1:3:3:1) 2007⁶

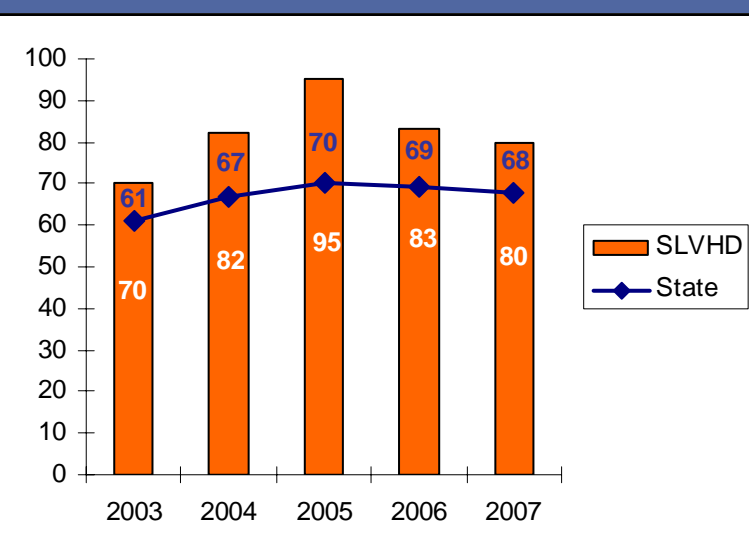
| | 2007 | | 2006 |
|---------------------------|----------------|-------------------------|-------------------------|
| Provider Type | Point Estimate | 95% Confidence Interval | 95% Confidence Interval |
| All VFC Private Providers | 58.3% | 55.4%, 61.3% | 46.0%, 53.2% |
| FQHC/RHC | NA | NA | NA |
| Local Health Departments | 80.1% | 77.0%, 83.2% | 80.0%, 85.2% |

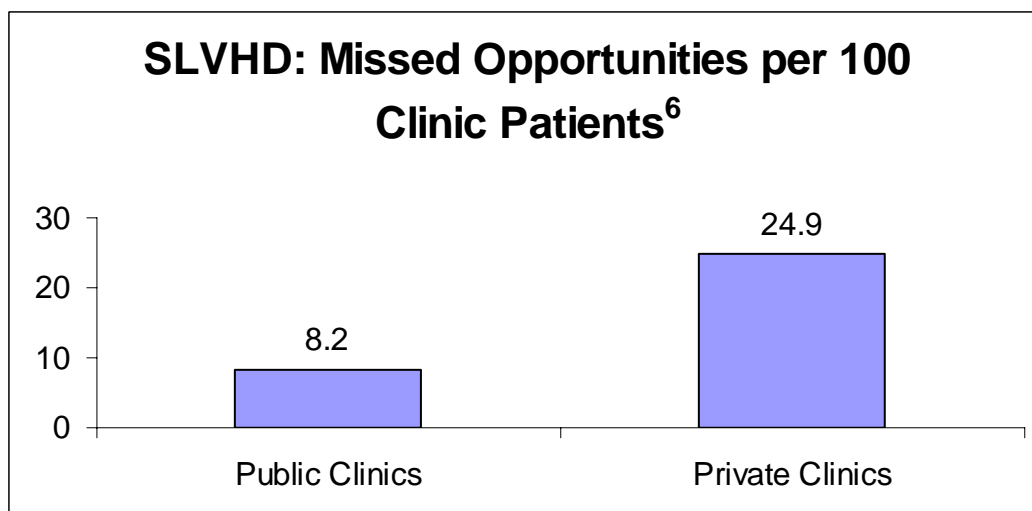
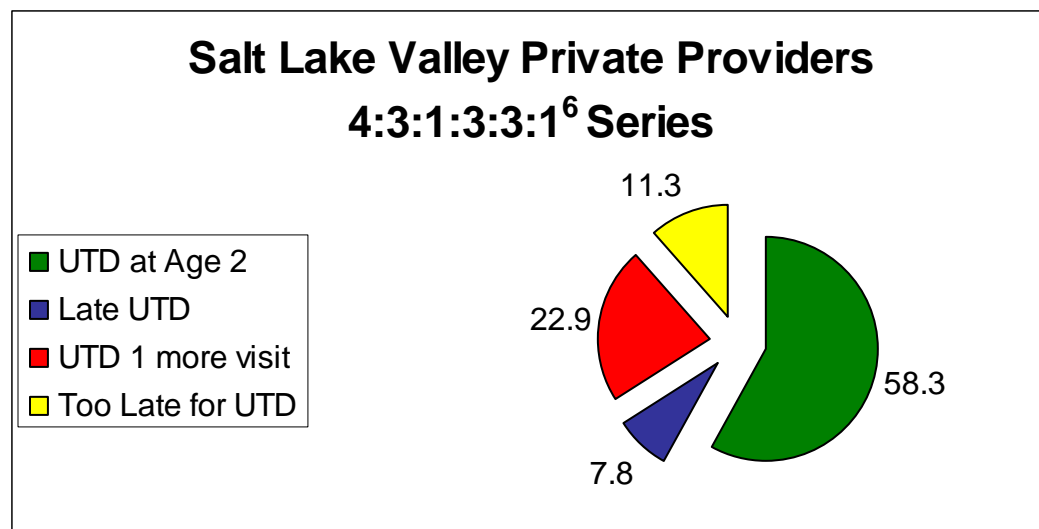
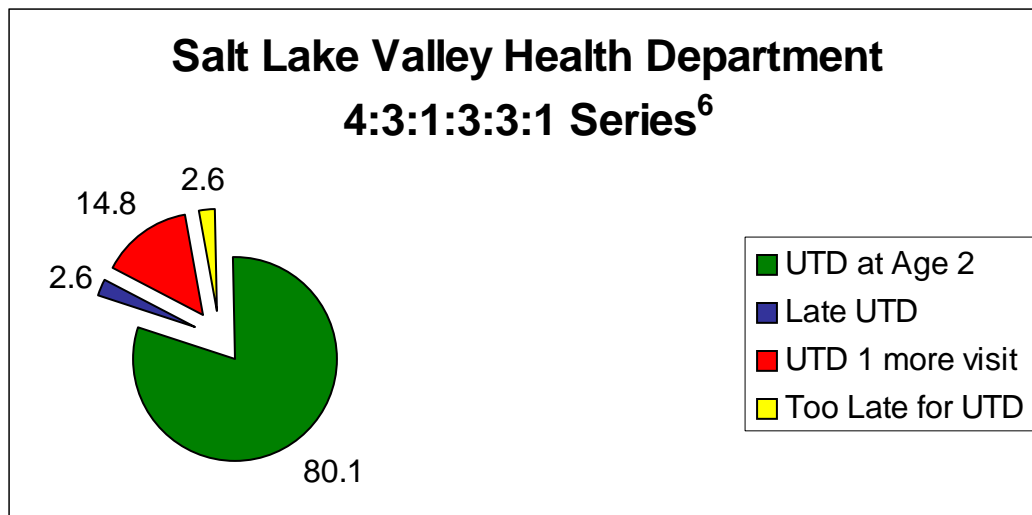
Health Care 2007

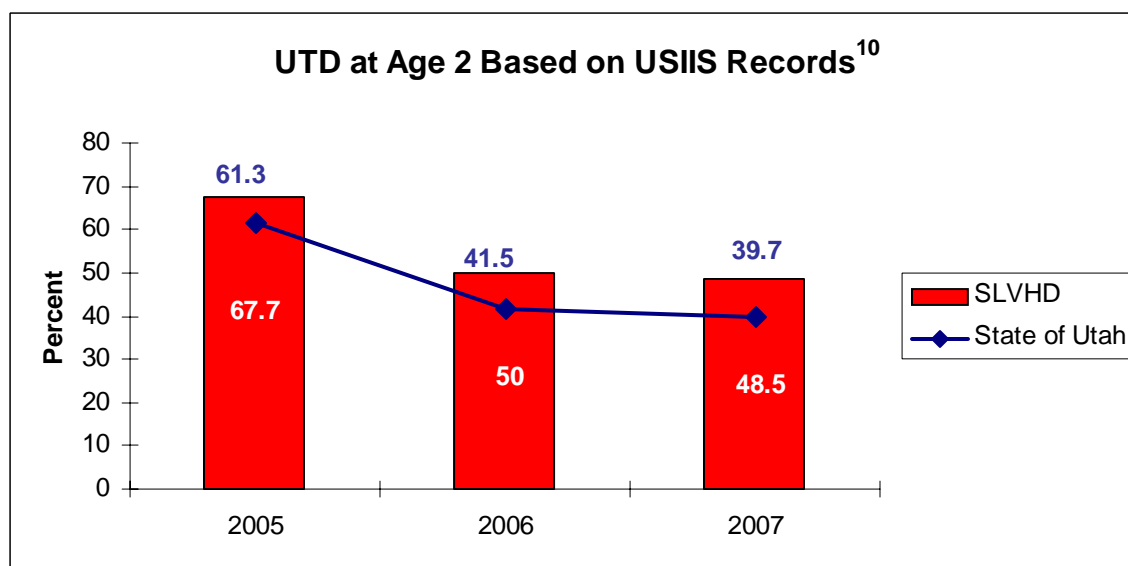
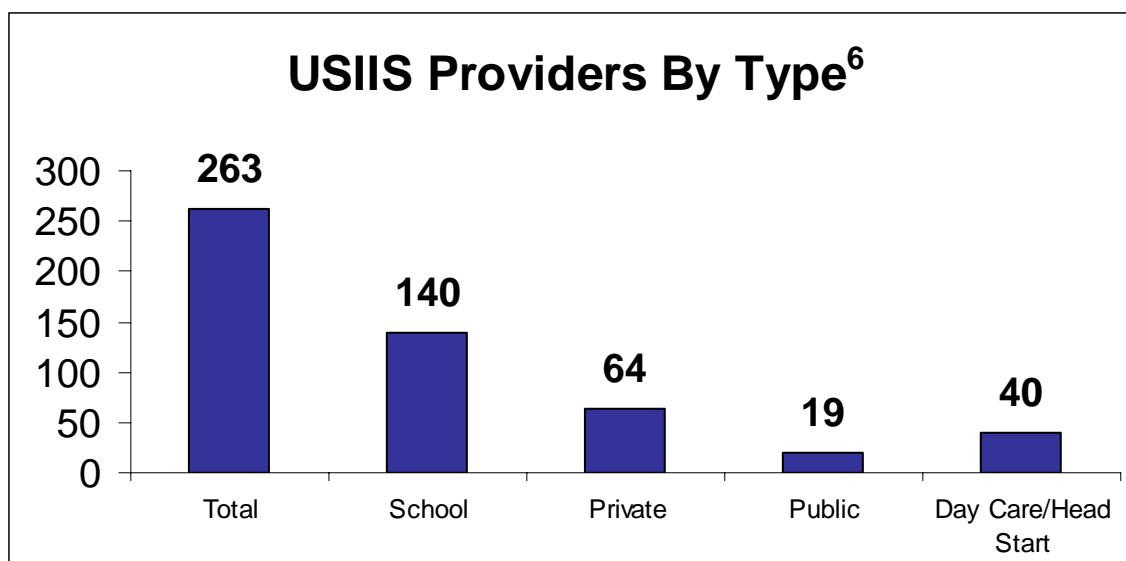
| Providers/Facilities | Number |
|---|--------|
| Private VFC Providers ⁶ | 67 |
| Public School Nurses | 27.25 |
| Charter School Nurses | 2.35 |
| Public Medical Clinics ⁶ | 16 |
| Hospitals ^{7,*} | 21 |
| Long-term Care and Assisted Living Centers ⁸ | 91 |
| Local Health District Offices ⁶ | 6 |

*St. Mark's Hospital & University of Utah Medical Center NOT offering birth dose Hepatitis B vaccine.

Salt Lake Valley LHD CASA UTD at Age 2 4:3:1:3:3:1 2003-2007⁶







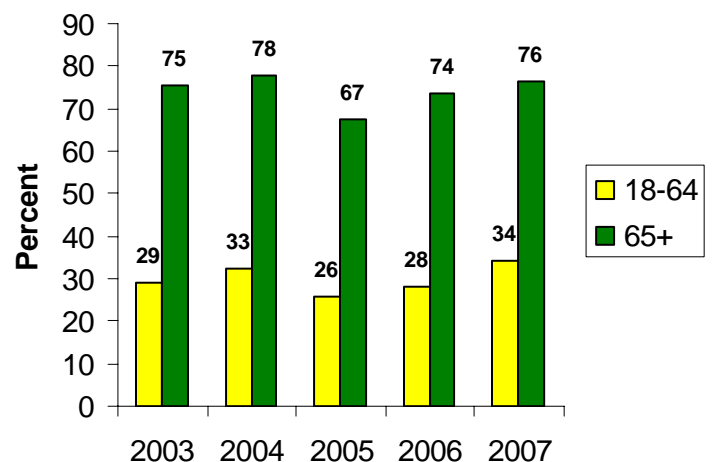
Adequately Immunized by School District 2007⁶

| Salt Lake | Granite | | Jordan | | Murray | | Salt Lake | |
|----------------------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|
| | Adequate Immune | Total Exempt | Adequate Immune | Total Exempt | Adequate Immune | Total Exempt | Adequate Immune | Total Exempt |
| Kindergarten School Entry | 86.5% | 1.7% | 84.9% | 2.7% | 82.7% | 1.7% | 82.7% | 1.1% |
| Second-Dose Measles (K-12) | 97.8% | 1.5% | 96.7% | 2.2% | 97.3% | 1.9% | 96.7% | 1.1% |
| 7th Grade Entry | 92.1% | 2.0% | 92.2% | 3.4% | 91.9% | 3.6% | 56.6% | 1.7% |

Child & School Health 2007

| Group | Clinics/ Facilities | Enrollment |
|---------------------------------------|------------------------|------------|
| WIC Women ¹¹ | 7 | 6,454 |
| WIC Infants ¹¹ | 7 | 6,589 |
| WIC Children ¹¹ | 7 | 10,838 |
| Child Care ¹² | 180 | 16,234 |
| Head Start ¹³ | 64 | 1,445 |
| Public Schools ¹⁴ | 264 | 178,097 |
| Private/Charter Schools ¹⁴ | 69 | 16,662 |

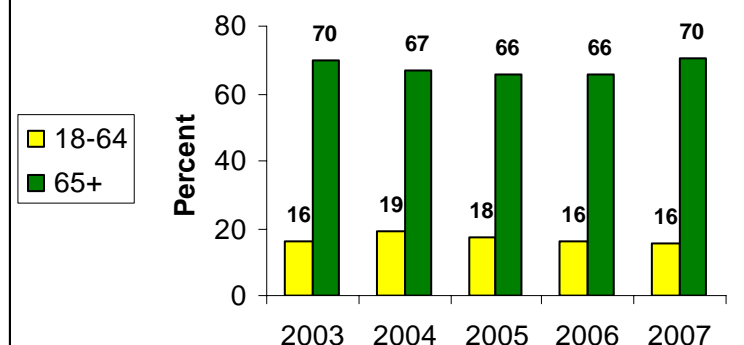
Influenza* Vaccinations 2003-2007¹⁵



Immunized for Child Care 2007⁶

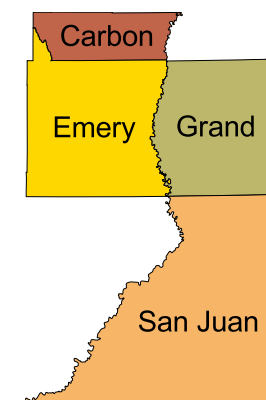
| Salt Lake | Adequately Immunized | Total Exemptions |
|--------------------------------------|----------------------|------------------|
| Child Care Facilities and Preschools | 95.4% | 1.1% |
| Head Start Centers | 93.3% | 0.4% |

Pneumococcal* Vaccinations 2003-2007¹⁵



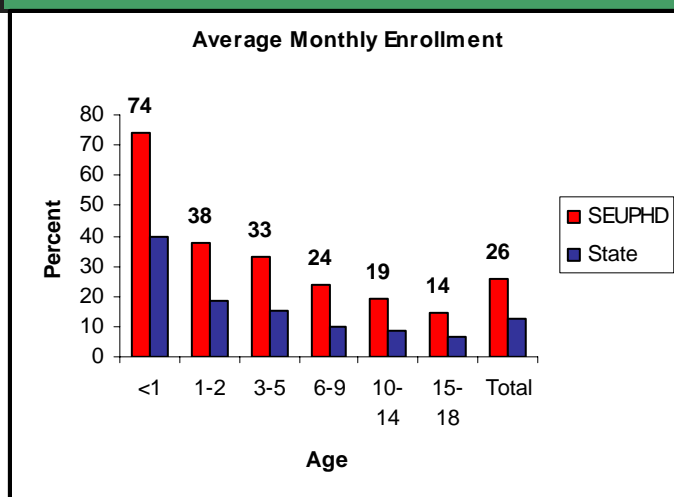
*Influenza=within past 12 months, pneumococcal=ever had

| Population 2007 ¹ | Number | % of Total |
|--------------------------------|---------------|--------------|
| Total Population | 54,123 | |
| 17 and Under | 15,064 | 27.8% |
| 18 to 34 | 14,078 | 26.0% |
| 35 to 49 | 9,153 | 16.9% |
| 50 to 64 | 9,183 | 17.0% |
| 65 and Over | 6,645 | 12.3% |
| Poverty 2006-2007 ² | Number | % of Total |
| Total 0-100% Poverty | 9,900 | 18.5% |
| 17 and Under | 3,300 | 21.7% |
| 18 to 34 | 3,000 | 21.8% |
| 35 to 49 | 1,400 | 15.6% |
| 50 to 64 | 1,000 | 10.8% |
| 65 and Over | 1,200 | 18.8% |
| Total 101-200% Poverty | 13,500 | 25.1% |
| 17 and Under | 5,100 | 33.4% |
| 18 to 34 | 3,700 | 26.6% |
| 35 to 49 | 2,200 | 23.7% |
| 50 to 64 | 1,200 | 12.9% |
| 65 and Over | 1,500 | 22.3% |



| Population 2007 ¹ | Number | % of Total |
|------------------------------|---------------|------------|
| Total 0-18 | 16,021 | |
| <1 | 785 | 4.9% |
| 1-2 | 1,515 | 9.5% |
| 3-5 | 2,369 | 14.8% |
| 6-9 | 3,275 | 20.4% |
| 10-14 | 4,198 | 26.2% |
| 15-18 | 3,879 | 24.2% |
| Population 2007 ¹ | Number | % of Total |
| Carbon | 19,730 | 36.5% |
| Emery | 10,461 | 19.3% |
| Grand | 9,125 | 16.9% |
| San Juan | 14,807 | 27.4% |

Medicaid Eligible Population by Age 2007⁵



| Uninsured 2006-2007 ³ | Number | % of Total |
|--------------------------------------|--------------|--------------|
| Total Uninsured (0-64) | 7,700 | 16.3% |
| 17 and Under | 1,900 | 12.3% |
| 18 to 34 | 4,000 | 28.6% |
| 35 to 49 | 1,000 | 11.3% |
| 50 to 64 | 800 | 9.0% |
| Selected Insurance Type ⁴ | Number | % of Total |
| Medicare | 9,100 | 19.4% |
| CHIP* | 700 | 5.3% |

*Children's Health Insurance Program, Ages 0 to 18

CoCASA: Up-to-Date at Age Two by Antigen 2007⁶

| | 4 DTaP | 3 Polio | 1 MMR | 3 Hib | 3 Hep B | 1 Varicella | 4:3:1:3:3:1 | 95% Confidence Interval |
|---------------|--------|---------|-------|-------|---------|-------------|-------------|-------------------------------|
| All Providers | 36.0% | 68.8% | 62.7% | 70.5% | 65.3% | 61.4% | 28.2% | 23.0%, 33.4% |

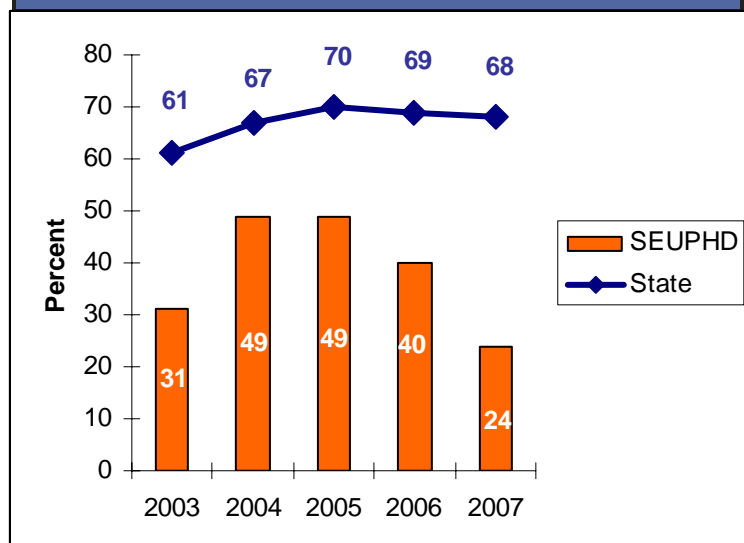
Up-to-Date at Age Two (4:3:1:3:3:1)⁶ 2007

| | 2007 | | 2006 |
|---------------------------|----------------|-------------------------|-------------------------|
| Provider Type | Point Estimate | 95% Confidence Interval | 95% Confidence Interval |
| All VFC Private Providers | 41.6% | 29.9%, 53.3% | NA |
| FQHC/RHC | 12.5% | 2.22%, 47.1% | NA |
| Local Health Departments | 24.2% | 18.4%, 30.0% | 31.6%, 47.1% |

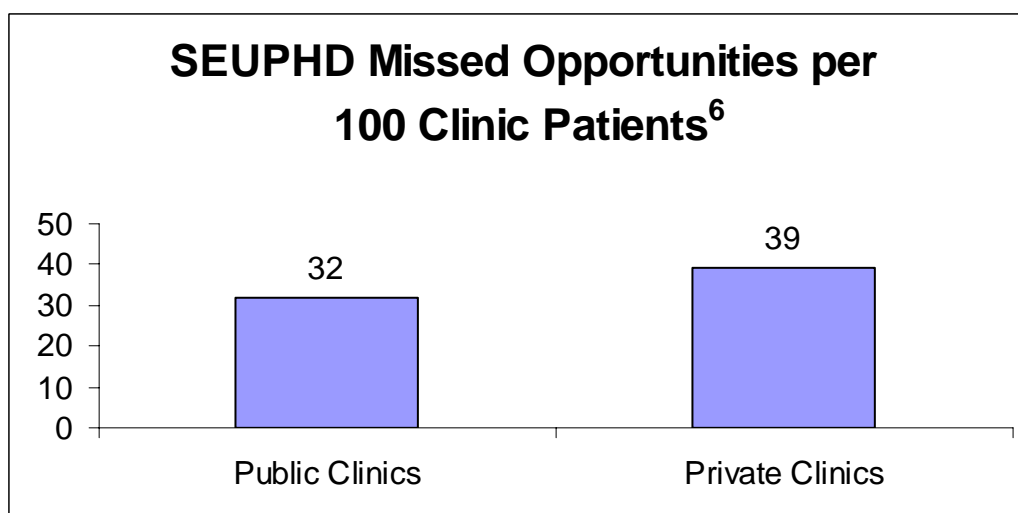
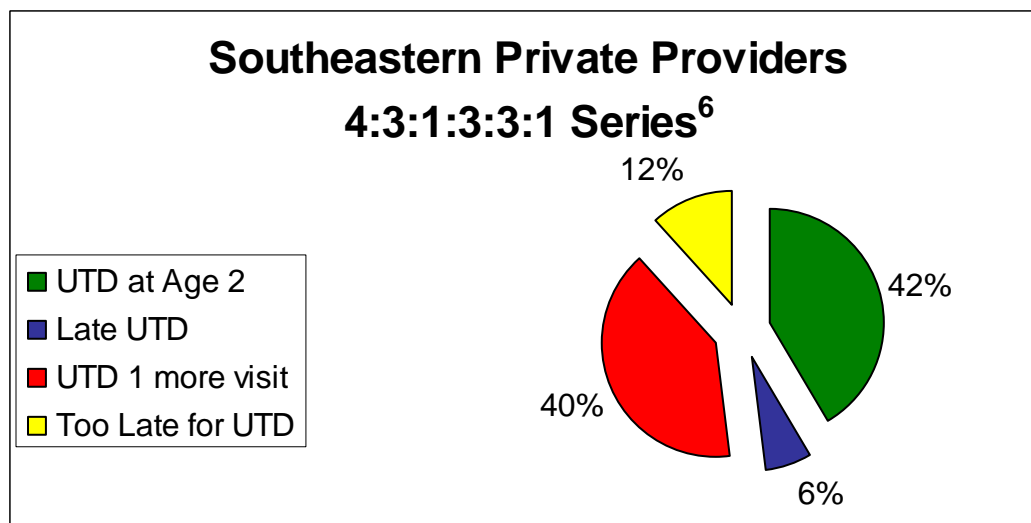
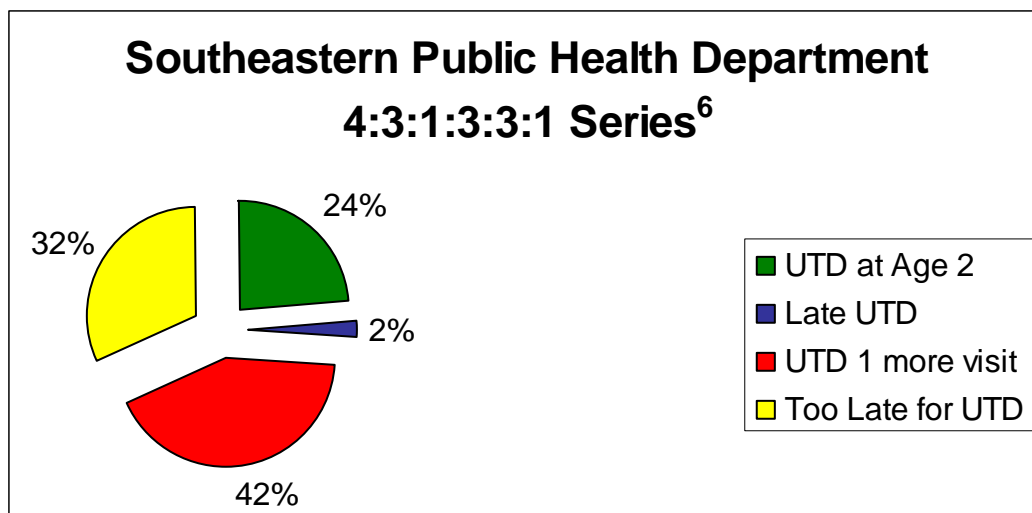
Health Care 2006

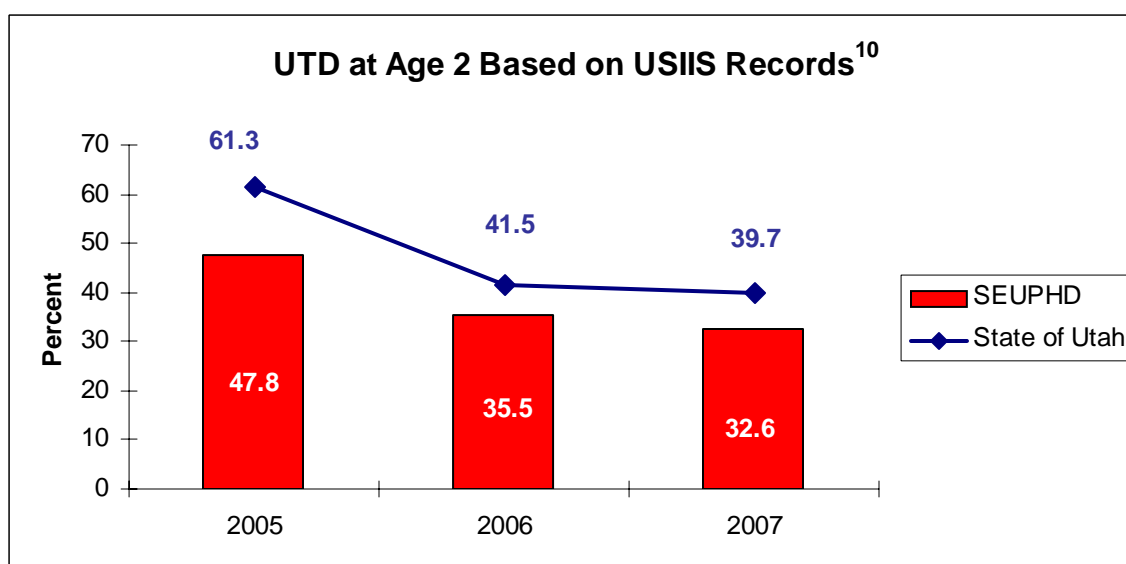
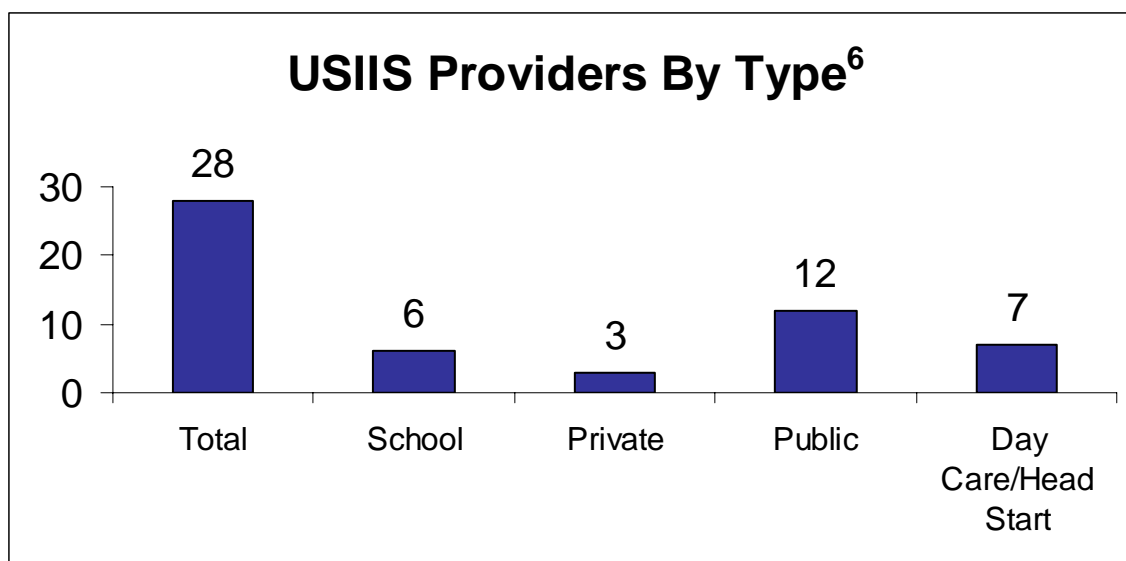
| Providers/Facilities | Number |
|---|--------|
| Private VFC Providers ⁶ | 4 |
| Public School Nurses | 3.51 |
| Charter School Nurses | 0.3 |
| Public Medical Clinics ⁶ | 9 |
| Hospitals ^{7,*} | 5 |
| Long-term Care and Assisted Living Centers ⁸ | 7 |
| Local Health District Offices ⁶ | 5 |

Southeastern LHD CASA UTD at Age 2 4:3:1:3:3:1 2003-2007⁶



*Allen Memorial Hospital & San Juan Hospital NOT offering birth dose Hepatitis B vaccine.





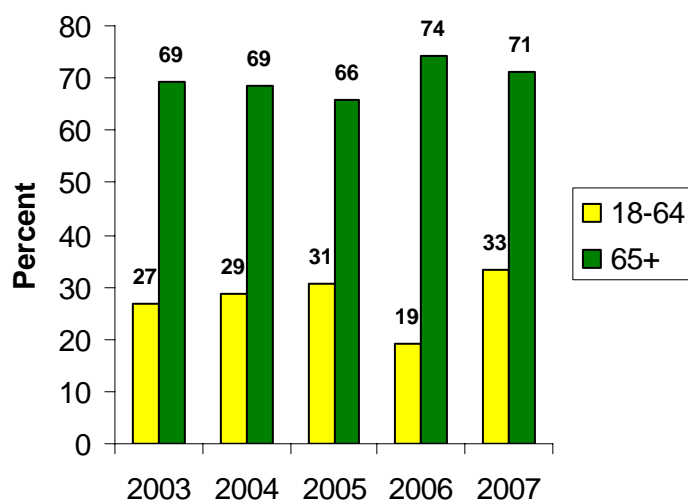
Adequately Immunized by School District 2007⁶

| Southeastern | Carbon | | Emery | | Grand | | San Juan | |
|----------------------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|
| | Adequate Immune | Total Exempt | Adequate Immune | Total Exempt | Adequate Immune | Total Exempt | Adequate Immune | Total Exempt |
| Kindergarten School Entry | 81.7% | 4.0% | 77.4% | 5.6% | 93.1% | 5.4% | 85.3% | 4.3% |
| Second-Dose Measles (K-12) | 97.5% | 1.8% | 97.0% | 2.8% | 96.3% | 3.7% | 96.9% | 2.1% |
| 7th Grade Entry | 93.0% | 1.3% | 96.8% | 1.9% | 95.5% | 4.5% | 97.4% | 1.3% |

Child & School Health 2007

| Group | Clinics/ Facilities | Enrollment |
|---------------------------------------|------------------------|------------|
| WIC Women ¹¹ | 5.9 | 389 |
| WIC Infants ¹¹ | 5.9 | 360 |
| WIC Children ¹¹ | 5.9 | 702 |
| Child Care ¹² | 29 | 719 |
| Head Start ¹³ | 10 | 334 |
| Public Schools ¹⁴ | 39 | 10,154 |
| Private/Charter Schools ¹⁴ | 6 | 1,495 |

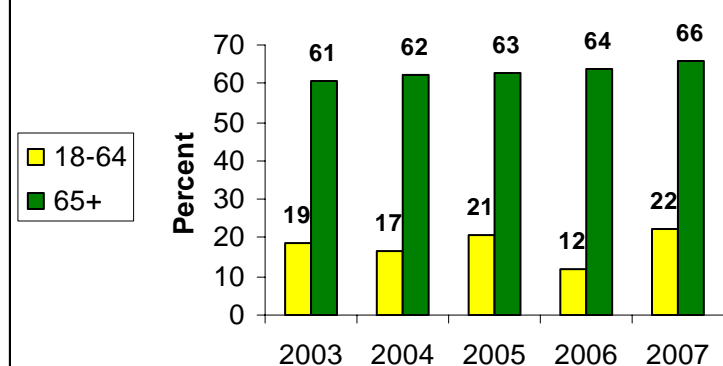
Influenza* Vaccinations 2003-2007¹⁵



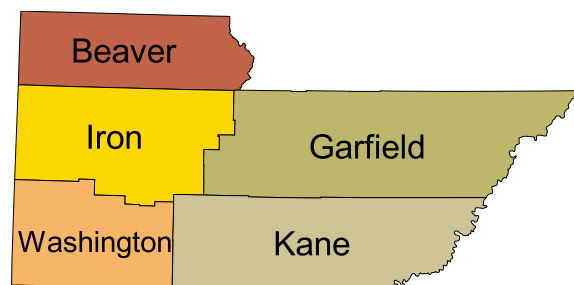
Immunized for Child Care 2007⁶

| Southeastern | Adequately Immunized | Total Exemptions |
|--------------------------------------|----------------------|------------------|
| Child Care Facilities and Preschools | 93.2% | 1.7% |
| Head Start Centers | 89.8% | 0.9% |

Pneumococcal* Vaccinations 2003-2007¹⁵

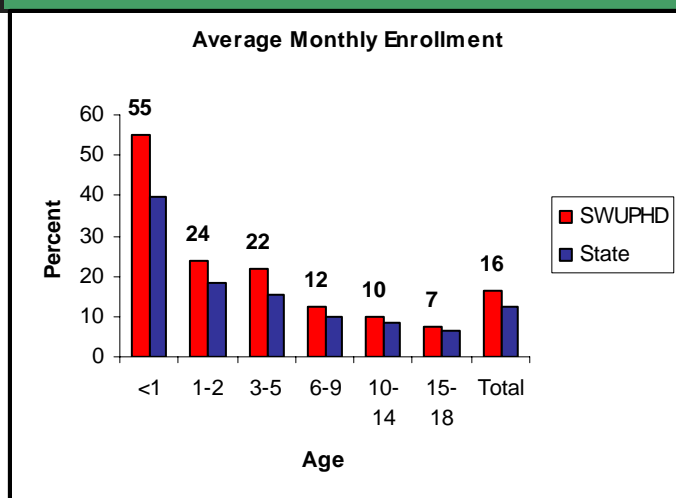


| Population 2007 ¹ | Number | % of Total |
|--------------------------------|----------------|--------------|
| Total Population | 203,499 | |
| 17 and Under | 57,280 | 28.1% |
| 18 to 34 | 54,243 | 26.7% |
| 35 to 49 | 32,680 | 16.1% |
| 50 to 64 | 28,279 | 13.9% |
| 65 and Over | 31,017 | 15.2% |
| Poverty 2006-2007 ² | Number | % of Total |
| Total 0-100% Poverty | 18,500 | 9.3% |
| 17 and Under | 7,100 | 12.7% |
| 18 to 34 | 4,600 | 8.6% |
| 35 to 49 | 2,500 | 7.8% |
| 50 to 64 | 1,900 | 6.8% |
| 65 and Over | 1,800 | 5.9% |
| Total 101-200% Poverty | 65,800 | 33.0% |
| 17 and Under | 21,800 | 38.7% |
| 18 to 34 | 22,500 | 42.3% |
| 35 to 49 | 9,600 | 29.8% |
| 50 to 64 | 3,700 | 13.3% |
| 65 and Over | 7,900 | 25.9% |



| Population 2007 ¹ | Number | % of Total |
|------------------------------|---------------|------------|
| Total 0-18 | 60,888 | |
| <1 | 3,924 | 6.4% |
| 1-2 | 7,542 | 12.4% |
| 3-5 | 10,250 | 16.8% |
| 6-9 | 12,640 | 20.8% |
| 10-14 | 14,064 | 23.1% |
| 15-18 | 12,468 | 20.5% |
| Population 2007 ¹ | Number | % of Total |
| Beaver | 6,466 | 3.2% |
| Garfield | 4,872 | 2.4% |
| Iron | 44,813 | 22.0% |
| Kane | 6,440 | 3.2% |
| Washington | 140,908 | 69.2% |

Medicaid Eligible Population by Age 2007⁵



| Uninsured 2006-2007 ³ | Number | % of Total |
|--------------------------------------|---------------|--------------|
| Total Uninsured (0-64) | 42,500 | 25.1% |
| 17 and Under | 12,400 | 22.1% |
| 18 to 34 | 20,100 | 37.8% |
| 35 to 49 | 6,700 | 21.0% |
| 50 to 64 | 3,300 | 11.8% |
| Selected Insurance Type ⁴ | Number | % of Total |
| Medicare | 31,300 | 19.7% |
| CHIP* | 3,800 | 8.5% |

*Children's Health Insurance Program, Ages 0 to 18

CoCASA: Up-to-Date at Age Two by Antigen 2007⁶

| | 4 DTaP | 3 Polio | 1 MMR | 3 Hib | 3 Hep B | 1 Varicella | 4:3:1:3:3:1 | 95% Confidence Interval |
|---------------|--------|---------|-------|-------|---------|-------------|-------------|-------------------------|
| All Providers | 51.8% | 73.6% | 70.8% | 66.5% | 69.5% | 66.1% | 43.4% | 40.4%, 46.4% |

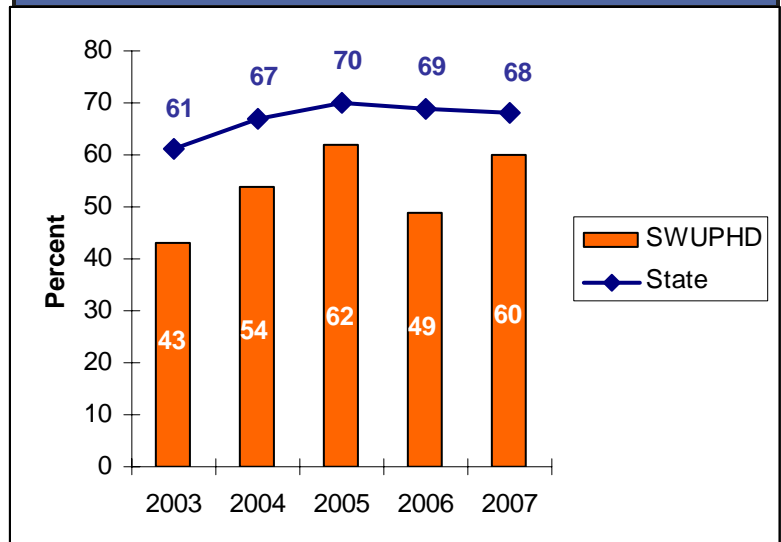
Up-to-Date at Age Two (4:3:1:3:3:1)⁶ 2007

| | 2007 | | 2006 |
|---------------------------|----------------|-------------------------|-------------------------|
| Provider Type | Point Estimate | 95% Confidence Interval | 95% Confidence Interval |
| All VFC Private Providers | 42.9% | 39.5%, 46.3% | 25.9%, 33.9% |
| FQHC/RHC | 25.5% | 16.9%, 34.1% | 20.1%, 38.3% |
| Local Health Departments | 59.6% | 51.3%, 67.9% | 43.8%, 54.2% |

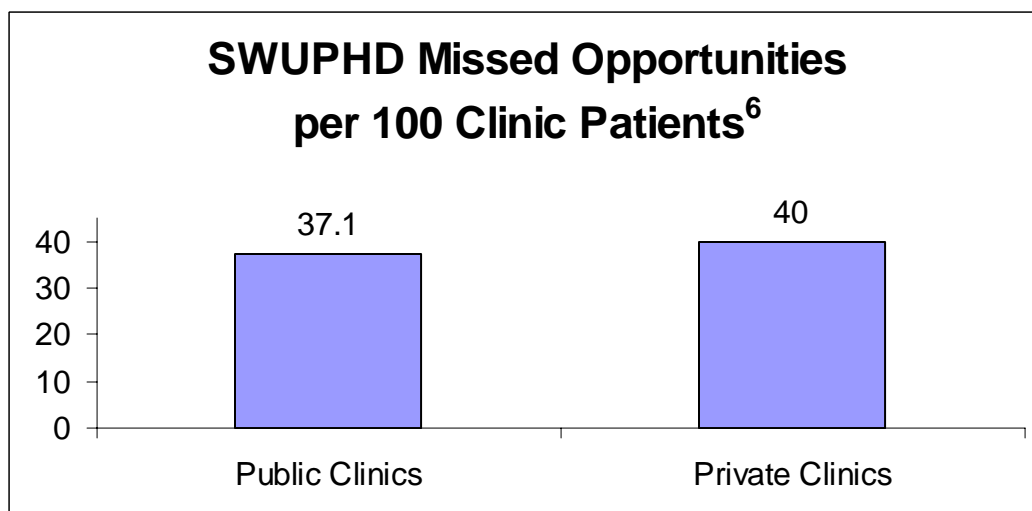
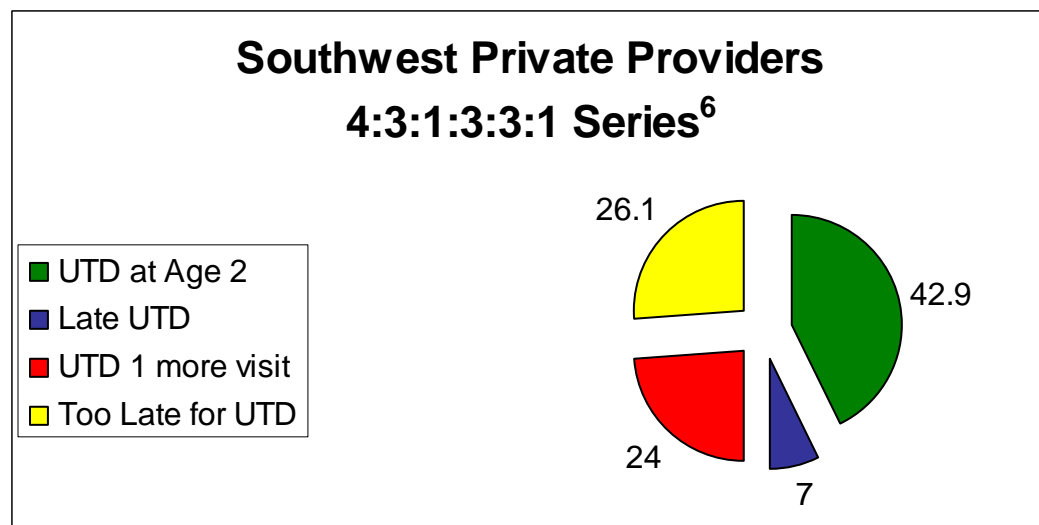
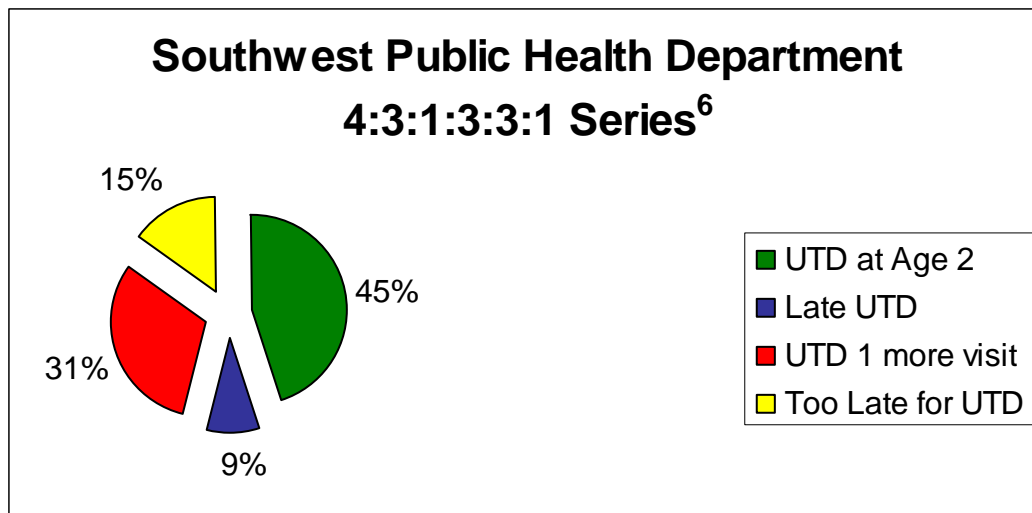
Health Care 2007

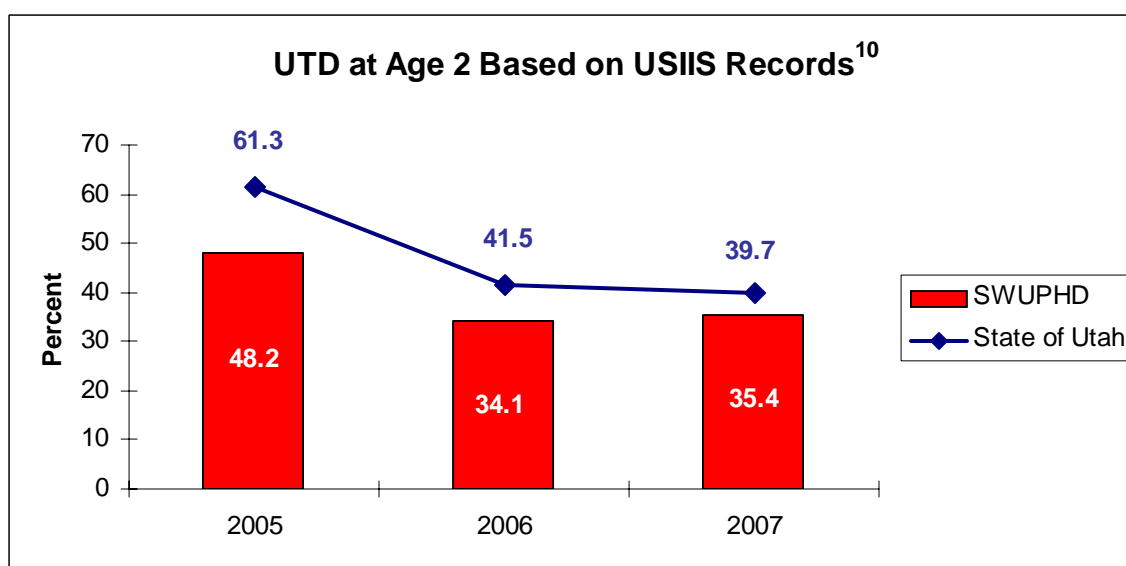
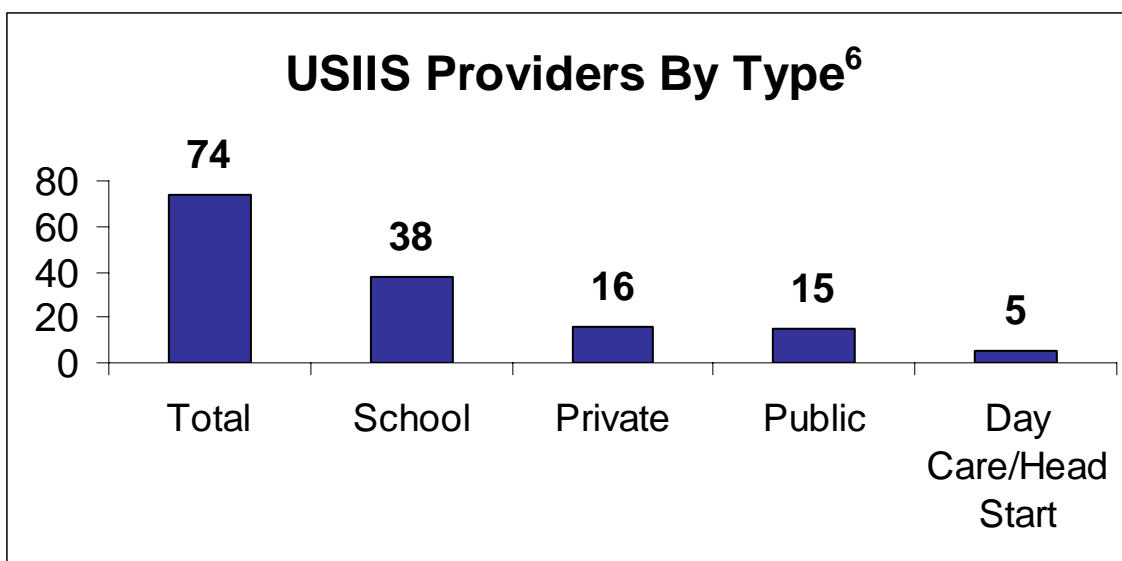
| Providers/Facilities | Number |
|---|--------|
| Private VFC Providers ⁶ | 18 |
| Public School Nurses | 9.55 |
| Charter School Nurses | 0 |
| Public Medical Clinics ⁶ | 11 |
| Hospitals ^{7, *} | 8 |
| Long-term Care and Assisted Living Centers ⁸ | 20 |
| Local Health District Offices ⁶ | 5 |

Southwest LHD CASA UTD at Age 2
4:3:1:3:3:1 2003-2007⁶



*Kane County Hospital & Milford Valley Hospital
NOT offering birth dose Hepatitis B vaccine.





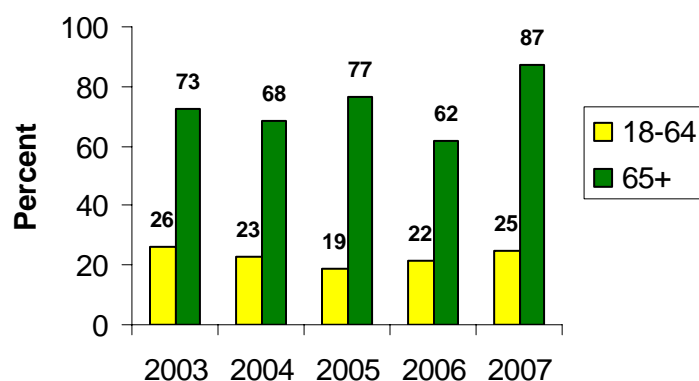
Adequately Immunized by School District 2007⁶

| Southwest | Beaver | | Garfield | | Iron | | Kane | | Washington | |
|----------------------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|
| | Adequate Immune | Total Exempt | Adequate Immune | Total Exempt | Adequate Immune | Total Exempt | Adequate Immune | Total Exempt | Adequate Immune | Total Exempt |
| Kindergarten School Entry | 94.6% | 0.8% | 77.6% | 3.0% | 79.6% | 6.3% | 88.4% | 5.8% | 81.0% | 4.0% |
| Second-Dose Measles (K-12) | 98.8% | 1.1% | 97.2% | 2.8% | 95.8% | 4.0% | 94.5% | 5.2% | 96.8% | 2.9% |
| 7th Grade Entry | 99.1% | 0.9% | 98.6% | 1.4% | 95.9% | 3.9% | 94.3% | 4.6% | 96.3% | 2.7% |

Child & School Health 2007

| Group | Clinics/ Facilities | Enrollment |
|---------------------------------------|------------------------|------------|
| WIC Women ¹¹ | 5.1 | 1,451 |
| WIC Infants ¹¹ | 5.1 | 1,341 |
| WIC Children ¹¹ | 5.1 | 2,429 |
| Child Care ¹² | 14 | 1,182 |
| Head Start ¹³ | 13 | 474 |
| Public Schools ¹⁴ | 84 | 37,611 |
| Private/Charter Schools ¹⁴ | 18 | 1,875 |

Influenza* Vaccinations 2003-2007¹⁵

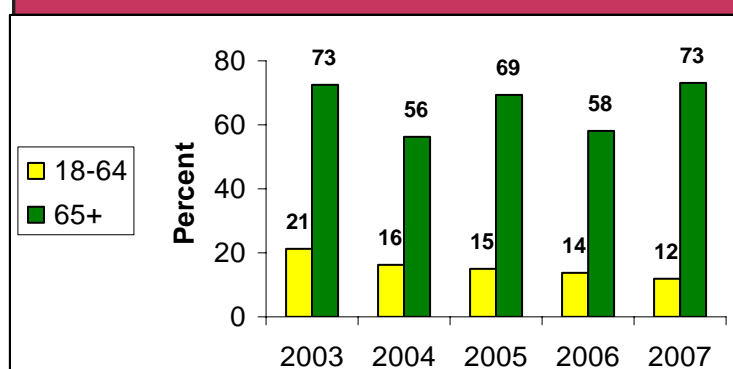


The jump in influenza vaccination from 2006 to 2007 is statistically significant ($p < 0.05$)

Immunized for Child Care 2007⁶

| Southwest | Adequately Immunized | Total Exemptions |
|--------------------------------------|----------------------|------------------|
| Child Care Facilities and Preschools | 88.3% | 2.8% |
| Head Start Centers | 93.9% | 3.0% |

Pneumococcal* Vaccinations 2003-2007¹⁵



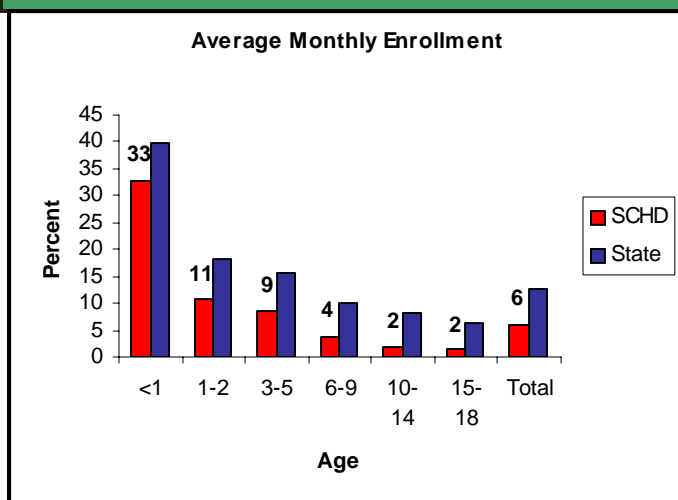
*Influenza=within past 12 months, pneumococcal=ever had

| Population 2007 ¹ | Number | % of Total |
|--------------------------------|---------------|--------------|
| Total Population | 38,412 | |
| 17 and Under | 9,913 | 25.8% |
| 18 to 34 | 9,420 | 24.5% |
| 35 to 49 | 8,940 | 23.3% |
| 50 to 64 | 7,619 | 19.8% |
| 65 and Over | 2,520 | 6.6% |
| Poverty 2006-2007 ² | Number | % of Total |
| Total 0-100% Poverty | 3,600 | 9.5% |
| 17 and Under | 1,100 | 10.8% |
| 18 to 34 | 1,600 | 17.8% |
| 35 to 49 | 400 | 4.4% |
| 50 to 64 | ** | ** |
| 65 and Over | ** | ** |
| Total 101-200% Poverty | 4,600 | 12.2% |
| 17 and Under | 1,500 | 15.4% |
| 18 to 34 | 1,300 | 14.5% |
| 35 to 49 | 800 | 8.8% |
| 50 to 64 | 500 | 6.2% |
| 65 and Over | 400 | 18.3% |



| Population 2007 ¹ | Number | % of Total |
|------------------------------|---------------|------------|
| Total 0-18 | 10,549 | |
| <1 | 561 | 5.3% |
| 1-2 | 1,112 | 10.5% |
| 3-5 | 1,685 | 16.0% |
| 6-9 | 2,069 | 19.6% |
| 10-14 | 2,678 | 25.4% |
| 15-18 | 2,444 | 23.2% |

Medicaid Eligible Population by Age 2007⁵



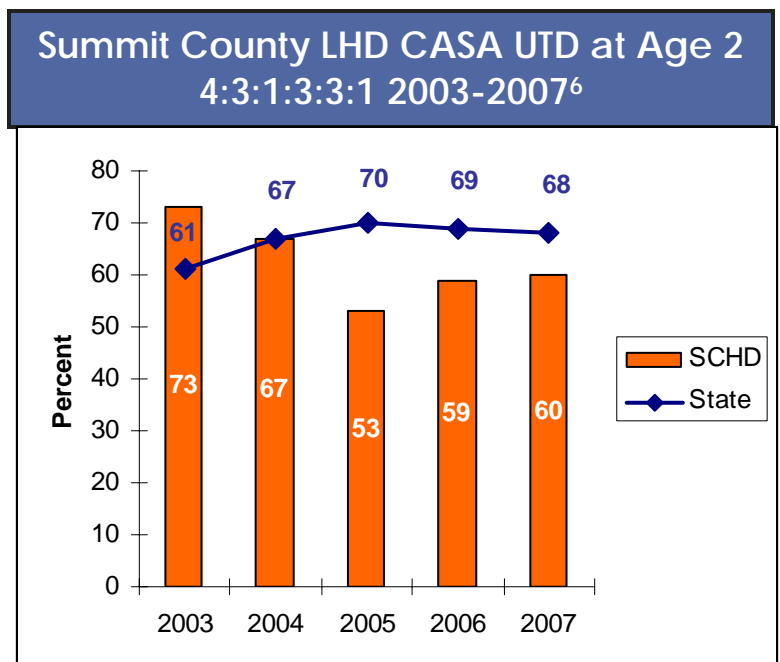
| Uninsured 2006-2007 ³ | Number | % of Total |
|--------------------------------------|--------------|--------------|
| Total Uninsured (0-64) | 4,000 | 11.4% |
| 17 and Under | 700 | 7.5% |
| 18 to 34 | 2,100 | 22.5% |
| 35 to 49 | 800 | 9.4% |
| 50 to 64 | 400 | 5.6% |
| Selected Insurance Type ⁴ | Number | % of Total |
| Medicare | 3,600 | 9.5% |
| CHIP* | ** | ** |

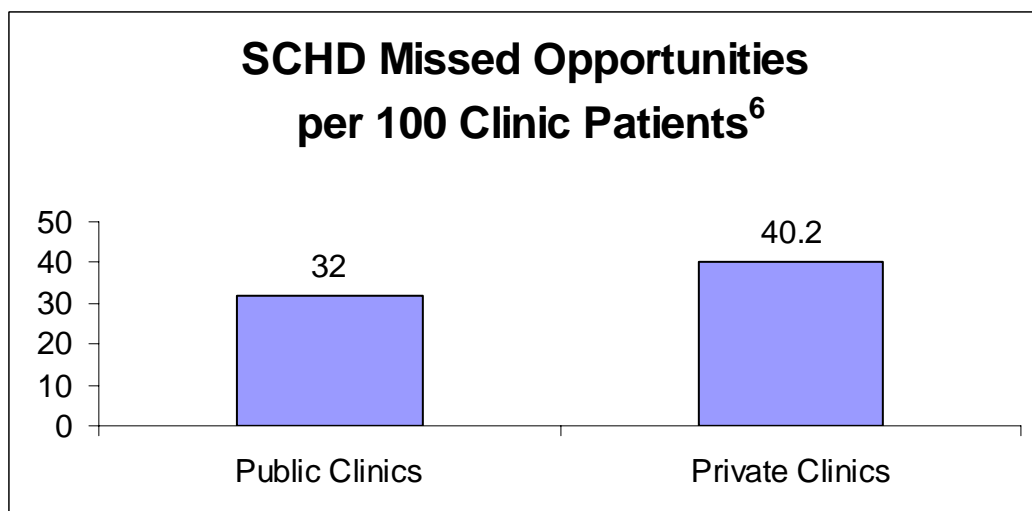
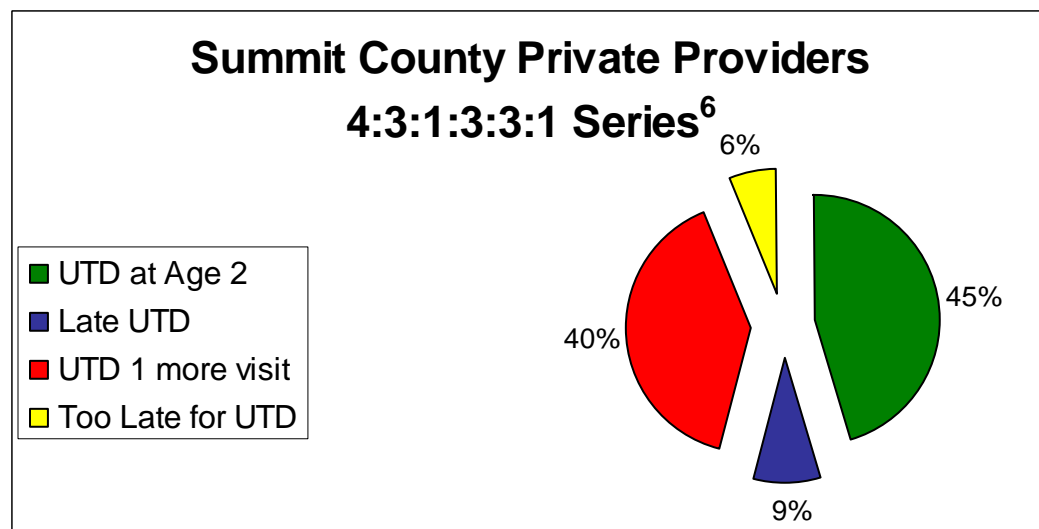
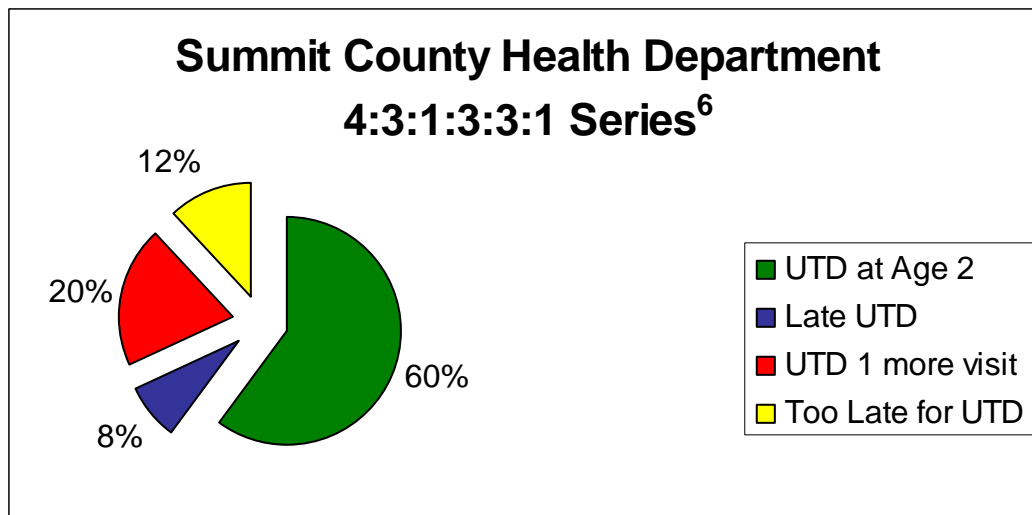
*Children's Health Insurance Program, Ages 0 to 18

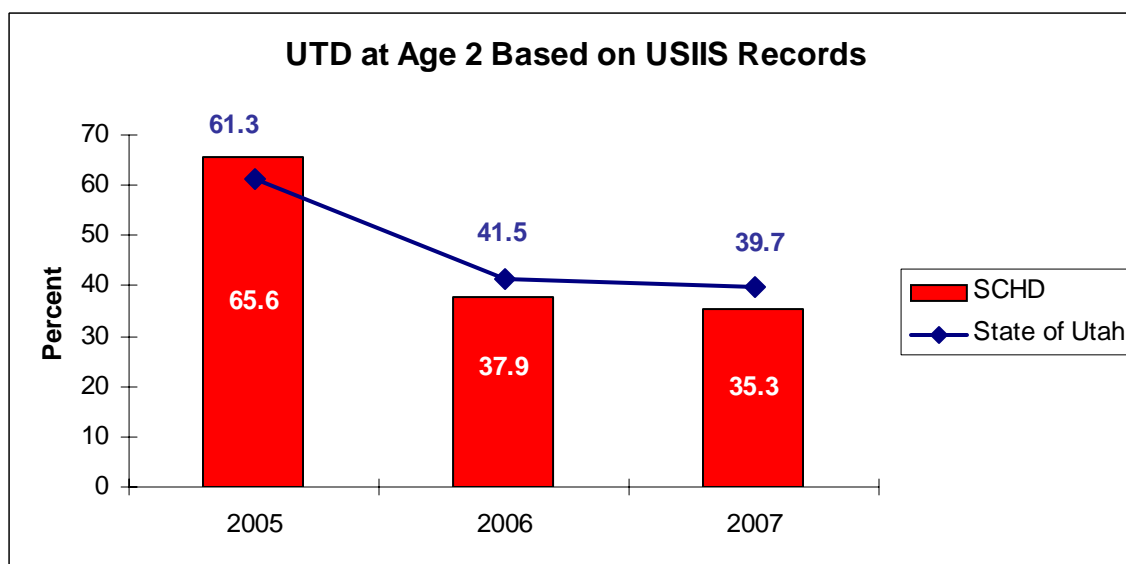
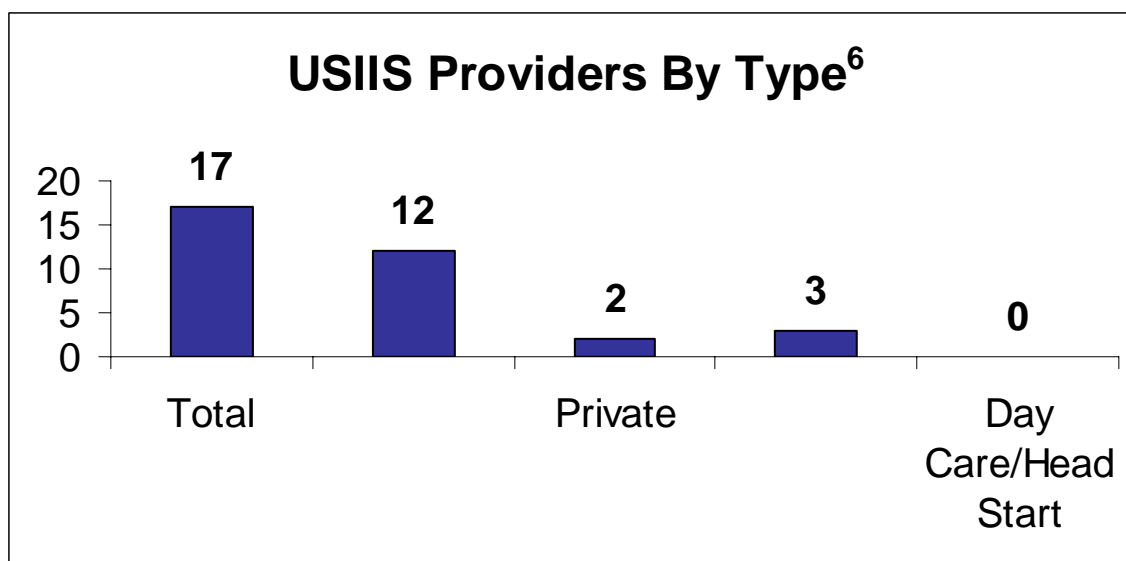
| CoCASA: Up-to-Date at Age Two by Antigen 2007 ⁶ | | | | | | | | |
|--|--------|---------|-------|-------|---------|-------------|-------------|-------------------------|
| | 4 DTaP | 3 Polio | 1 MMR | 3 Hib | 3 Hep B | 1 Varicella | 4:3:1:3:3:1 | 95% Confidence Interval |
| All Providers | 77.5% | 88.0% | 85.2% | 92.3% | 65.5% | 83.8% | 47.9% | 39.3%, 56.5% |

| Up-to-Date at Age Two (4:3:1:3:3:1) ⁶ 2007 | | | |
|---|----------------|-------------------------|-------------------------|
| | 2007 | | 2006 |
| Provider Type | Point Estimate | 95% Confidence Interval | 95% Confidence Interval |
| All VFC Private Providers | 45.3% | 35.9%, 54.8% | 60.1%, 74.7% |
| FQHC/RHC | NA | NA | NA |
| Local Health Departments | 60.0% | 38.8%, 81.2% | 39.0%, 78.2% |

| Health Care 2007 | |
|---|--------|
| Providers/Facilities | Number |
| Private VFC Providers ⁶ | 4 |
| Public School Nurses (FTE) ¹⁴ | 2.1 |
| Charter School Nurses (FTE) ¹⁴ | 0 |
| Public Medical Clinics ⁶ | 2 |
| Hospitals ⁷ | 0 |
| Long-term Care and Assisted Living Centers ⁸ | 1 |
| Local Health District Offices ⁶ | 3 |







Adequately Immunized by School District 2007⁶

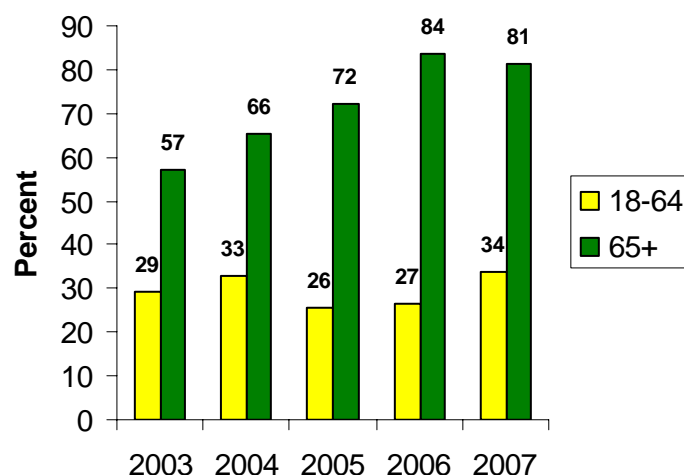
| Summit | North Summit | | Park City | | South Summit | |
|----------------------------|----------------------|------------------|----------------------|------------------|----------------------|------------------|
| | Adequately Immunized | Total Exemptions | Adequately Immunized | Total Exemptions | Adequately Immunized | Total Exemptions |
| Kindergarten School Entry | 93.1% | 0% | 82.4% | 4.0% | 88.9% | 4.3% |
| Second-Dose Measles (K-12) | 98.4% | 1.4% | 94.4% | 4.4% | 98.5% | 1.5% |
| 7th Grade Entry | 97.3% | 1.3% | 96.1% | 2.6% | 92.8% | 7.2% |

Child & School Health 2007

| Group | Clinics/ Facilities | Enrollment |
|---------------------------------------|------------------------|------------|
| WIC Women ¹¹ | 2 | 183 |
| WIC Infants ¹¹ | 2 | 155 |
| WIC Children ¹¹ | 2 | 264 |
| Child Care ¹² | 6 | 280 |
| Head Start ¹³ | + | + |
| Public Schools ¹⁴ | 14 | 6,817 |
| Private/Charter Schools ¹⁴ | 5 | 417 |

*Data for Summit County Head Start are included in DCHD.

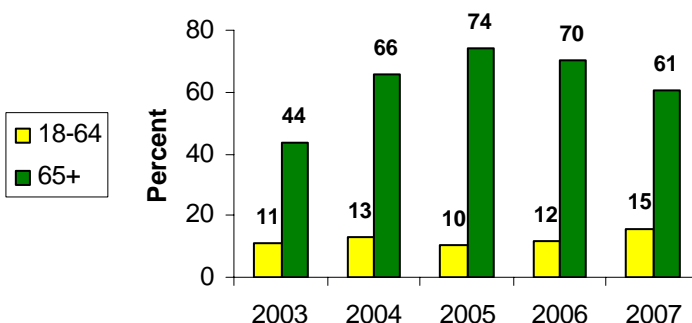
Influenza* Vaccinations 2003-2007¹⁵



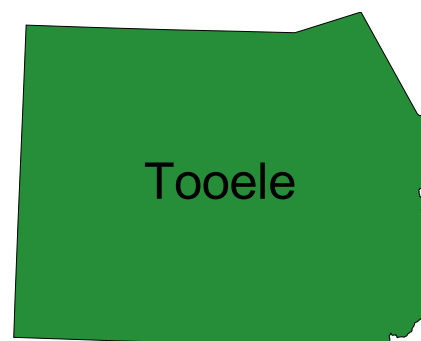
Immunized for Child Care 2007⁶

| Summit | Adequately Immunized | Total Exemptions |
|--------------------------------------|----------------------|----------------------|
| Child Care Facilities and Preschools | 88.9% | 2.5% |
| Head Start Centers | Reported in Davis HS | Reported in Davis HS |

Pneumococcal* Vaccinations 2003-2007¹⁵

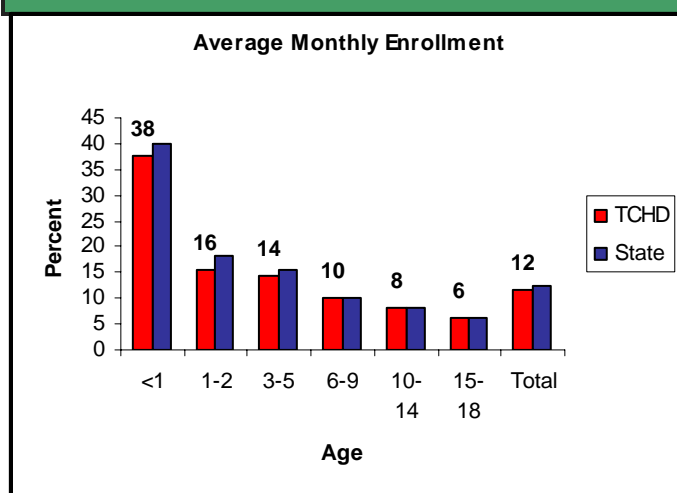


| Population 2007 ¹ | Number | % of Total |
|--------------------------------|---------------|---------------|
| Total Population | 56,536 | |
| 17 and Under | 18,446 | 32.6% |
| 18 to 34 | 15,272 | 27.0% |
| 35 to 49 | 11,352 | 20.1% |
| 50 to 64 | 7,520 | 13.3% |
| 65 and Over | 3,946 | 7.0% |
| Poverty 2006-2007 ² | Number | % of Total |
| Total 0-100% Poverty | 4,400 | 7.9% |
| 17 and Under | 1,500 | 8.1% |
| 18 to 34 | 1,200 | 8.1% |
| 35 to 49 | 600 | 5.8% |
| 50 to 64 | 500 | 6.5% |
| 65 and Over | 400 | 9.7% |
| Total 101-200% Poverty | 10,800 | 19.50% |
| 17 and Under | 4,600 | 25.16% |
| 18 to 34 | 3,300 | 21.96% |
| 35 to 49 | 1,800 | 16.33% |
| 50 to 64 | 500 | 6.60% |
| 65 and Over | 500 | 12.95% |



| Population 2007 ¹ | Number | % of Total |
|------------------------------|---------------|------------|
| Total 0-18 | 19,310 | |
| <1 | 1,106 | 5.7% |
| 1-2 | 2,191 | 11.3% |
| 3-5 | 3,330 | 17.2% |
| 6-9 | 4,274 | 22.1% |
| 10-14 | 4,828 | 25.0% |
| 15-18 | 3,581 | 18.5% |

Medicaid Eligible Population by Age 2007⁵



| Uninsured 2006-2007 ³ | Number | % of Total |
|--------------------------------------|--------------|-------------|
| Total Uninsured (0-64) | 3,500 | 6.8% |
| 17 and Under | 500 | 2.8% |
| 18 to 34 | 1,800 | 12.3% |
| 35 to 49 | 900 | 8.3% |
| 50 to 64 | 300 | 4.2% |
| Selected Insurance Type ⁴ | Number | % of Total |
| Medicare | 4,400 | 8.0% |
| CHIP* | 1,200 | 5.9% |

*Children's Health Insurance Program, Ages 0 to 18

CoCASA: Up-to-Date at Age Two by Antigen 2007⁶

| County | 4 DTaP | 3 Polio | 1 MMR | 3 Hib | 3 Hep B | 1 Varicella | 4:3:1:3:3:1 | 95 % Confidence Interval |
|---------------|--------|---------|-------|-------|---------|-------------|-------------|--------------------------------|
| All Providers | 77.9% | 93.9% | 93.4% | 95.3% | 88.7% | 91.1% | 68.5% | 62.0%, 75.0% |

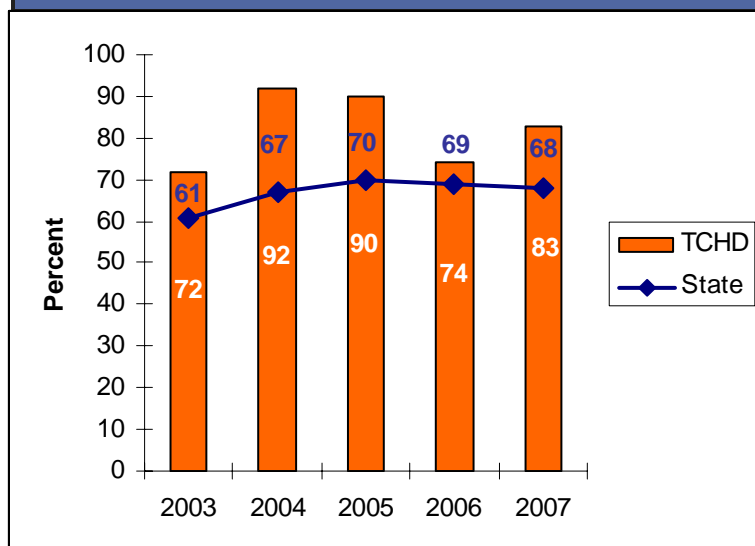
Up-to-Date at Age Two (4:3:1:3:3:1)⁶ 2007

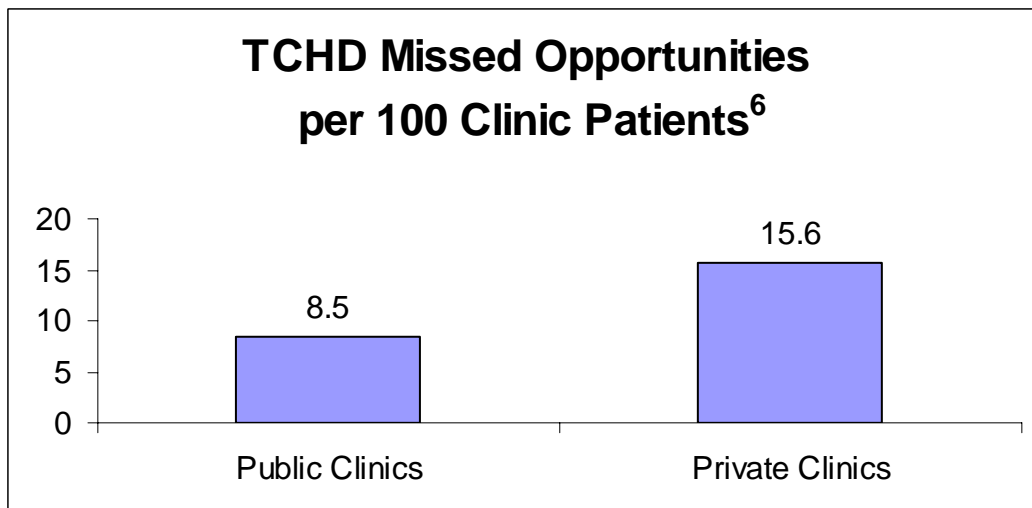
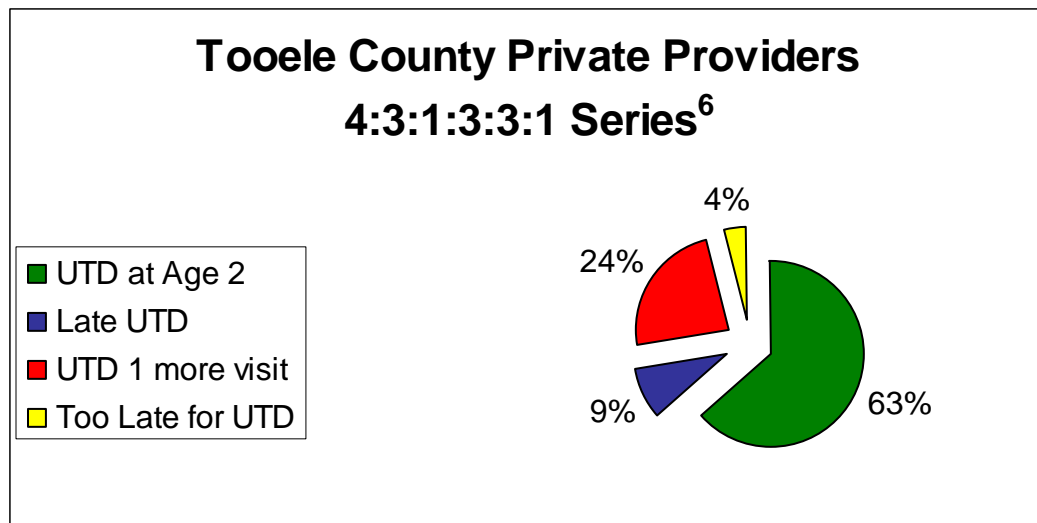
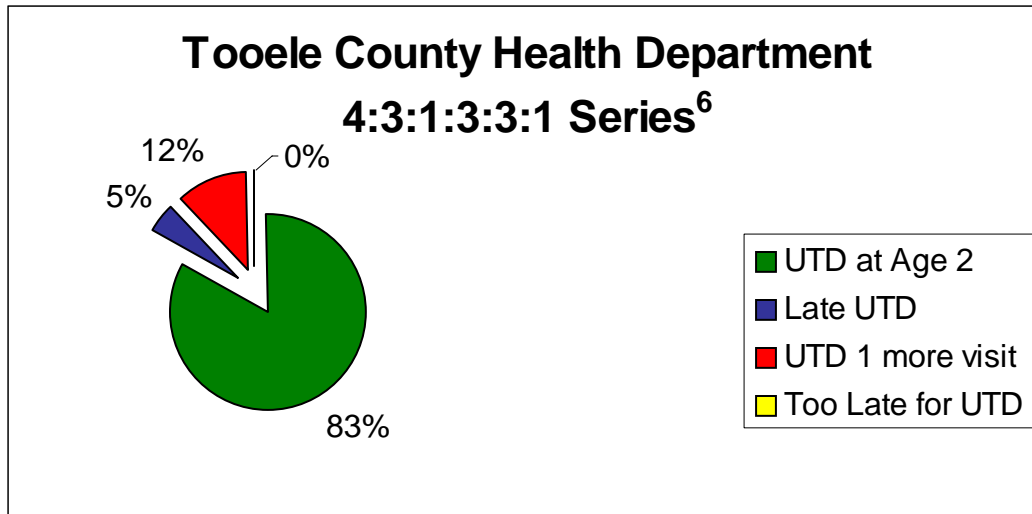
| | 2007 | | 2006 |
|---------------------------|----------------|-------------------------|-------------------------|
| Provider Type | Point Estimate | 95% Confidence Interval | 95% Confidence Interval |
| All VFC Private Providers | 63.0% | 55.1%, 71.0% | 43.4%, 60.0% |
| FQHC/RHC | NA | NA | NA |
| Local Health Departments | 83.1% | 72.7%, 93.5% | 77.1%, 94.7% |

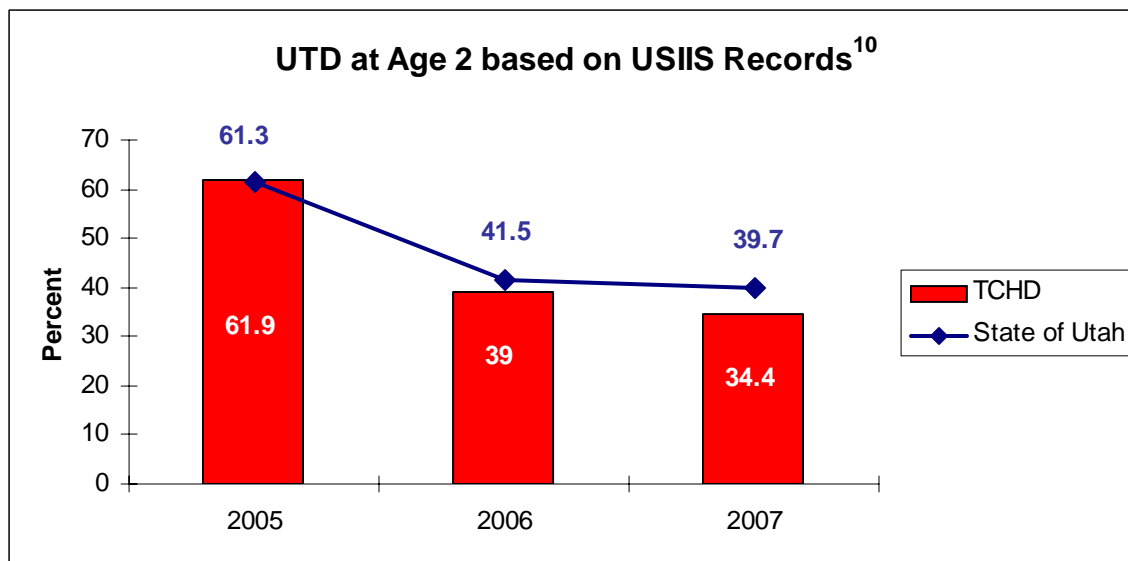
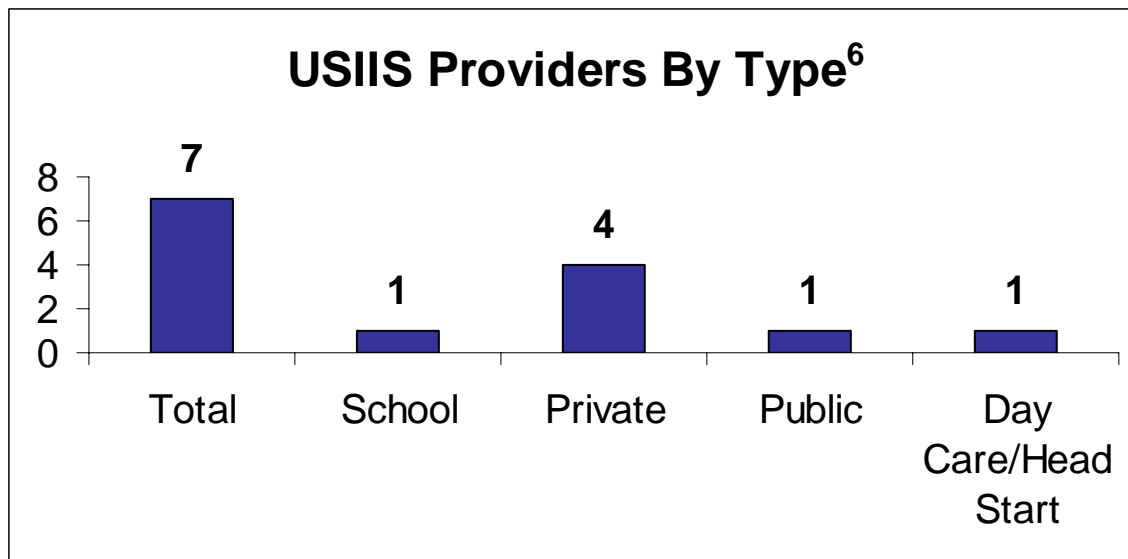
Health Care 2007

| Providers/Facilities | Number |
|---|--------|
| Private VFC Providers ⁶ | 9 |
| Public School Nurses (FTE) ¹⁴ | 2.0 |
| Charter School Nurses (FTE) ¹⁴ | 0 |
| Public Medical Clinics ⁶ | 1 |
| Hospitals ⁷ | 1 |
| Long-term Care and Assisted Living Centers ⁸ | 4 |
| Local Health District Offices ⁶ | 1 |

Tooele County LHD CASA UTD at Age 2 4:3:1:3:3:1 2003-2007⁶







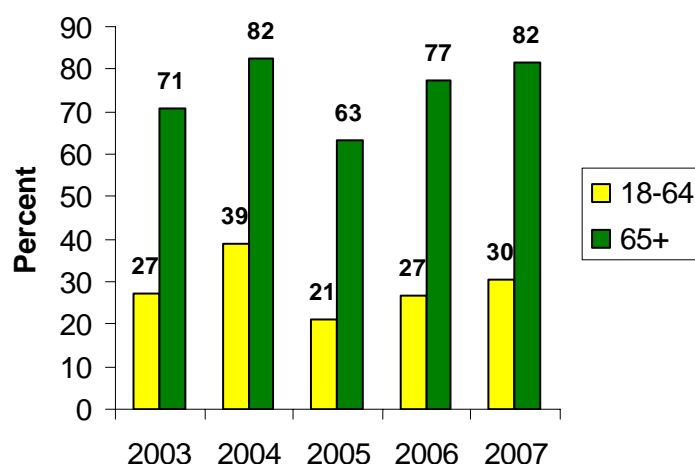
Adequately Immunized by School District 2007⁶

| Tooele | Tooele | |
|----------------------------|----------------------|------------------|
| | Adequately Immunized | Total Exemptions |
| Kindergarten School Entry | 87.7% | 2.4% |
| Second-Dose Measles (K-12) | 98.4% | 1.5% |
| 7th Grade Entry | 97.8% | 1.6% |

Child & School Health 2007

| Group | Clinics/ Facilities | Enrollment |
|---------------------------------------|------------------------|------------|
| WIC Women ¹¹ | 2 | 439 |
| WIC Infants ¹¹ | 2 | 428 |
| WIC Children ¹¹ | 2 | 780 |
| Child Care ¹² | 3 | 245 |
| Head Start ¹³ | 7 | 263 |
| Public Schools ¹⁴ | 25 | 12,988 |
| Private/Charter Schools ¹⁴ | 2 | 100 |

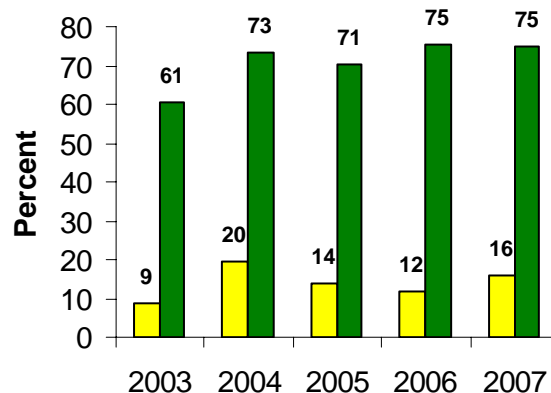
Influenza* Vaccinations 2003-2007¹⁵



Immunized for Child Care 2007⁶

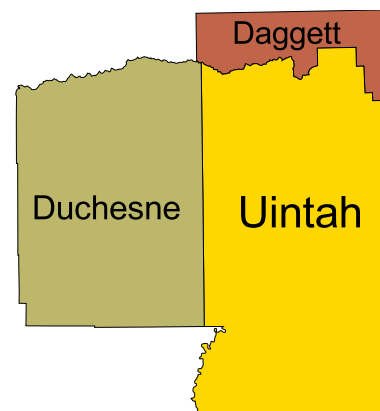
| Tooele | Adequately Immunized | Total Exemptions |
|--------------------------------------|----------------------|------------------|
| Child Care Facilities and Preschools | 95.9% | 0.8% |
| Head Start Centers | 90.9% | 1.5% |

Pneumococcal* Vaccinations 2003-2007¹⁵



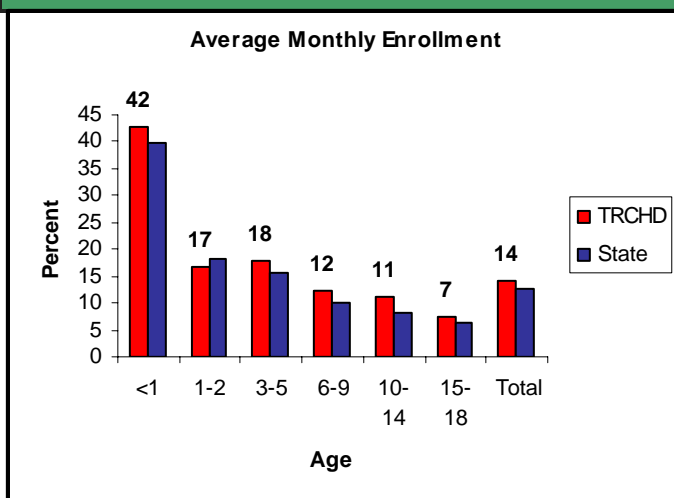
*Influenza=within past 12 months, pneumococcal=ever had

| Population 2007 ¹ | Number | % of Total |
|--------------------------------|---------------|--------------|
| Total Population | 45,938 | |
| 17 and Under | 14,238 | 31.0% |
| 18 to 34 | 12,281 | 26.7% |
| 35 to 49 | 7,745 | 16.9% |
| 50 to 64 | 6,945 | 15.1% |
| 65 and Over | 4,729 | 10.3% |
| Poverty 2006-2007 ² | Number | % of Total |
| Total 0-100% Poverty | 3,200 | 7.0% |
| 17 and Under | 1,300 | 9.4% |
| 18 to 34 | 600 | 5.2% |
| 35 to 49 | 500 | 7.0% |
| 50 to 64 | 200 | 3.5% |
| 65 and Over | 500 | 10.3% |
| Total 101-200% Poverty | 10,800 | 23.9% |
| 17 and Under | 3,800 | 26.8% |
| 18 to 34 | 2,800 | 23.8% |
| 35 to 49 | 1,500 | 19.6% |
| 50 to 64 | 1,300 | 19.2% |
| 65 and Over | 1,400 | 30.3% |



| Population 2007 ¹ | Number | % of Total |
|------------------------------|---------------|------------|
| Total 0-18 | 15,101 | |
| <1 | 983 | 6.5% |
| 1-2 | 1,805 | 12.0% |
| 3-5 | 2,472 | 16.4% |
| 6-9 | 2,965 | 19.6% |
| 10-14 | 3,632 | 24.1% |
| 15-18 | 3,244 | 21.5% |
| Population 2007 ¹ | Number | % of Total |
| Daggett | 969 | 2.1% |
| Duchesne | 16,163 | 35.2% |
| Uintah | 28,806 | 62.7% |

Medicaid Eligible Population by Age 2007⁵



| Uninsured 2006-2007 ³ | Number | % of Total |
|--------------------------------------|--------------|--------------|
| Total Uninsured (0-64) | 5,600 | 13.9% |
| 17 and Under | 1,300 | 9.6% |
| 18 to 34 | 2,400 | 20.4% |
| 35 to 49 | 900 | 11.9% |
| 50 to 64 | 1,000 | 14.1% |
| Selected Insurance Type ⁴ | Number | % of Total |
| Medicare | 6,600 | 17.2% |
| CHIP* | 300 | 2.3% |

*Children's Health Insurance Program, Ages 0 to 18

CoCASA: Up-to-Date at Age Two by Antigen 2007⁶

| | 4 DTaP | 3 Polio | 1 MMR | 3 Hib | 3 Hep B | 1 Varicella | 4:3:1:3:3:1 | 95% Confidence Interval |
|---------------|--------|---------|-------|-------|---------|-------------|-------------|-------------------------------|
| All Providers | 53.6% | 71.8% | 76.6% | 78.1% | 74.1% | 73.2% | 46.4% | 41.0%, 51.8% |

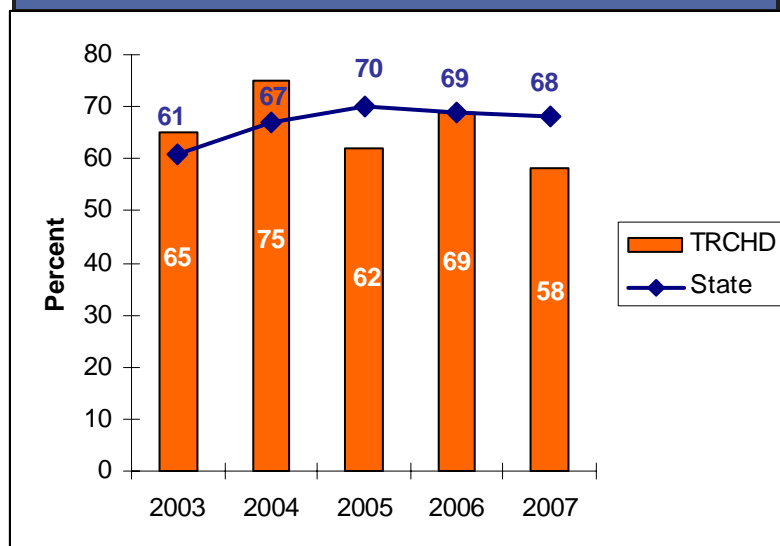
Up-to-Date at Age Two (4:3:1:3:3:1)⁶ 2007

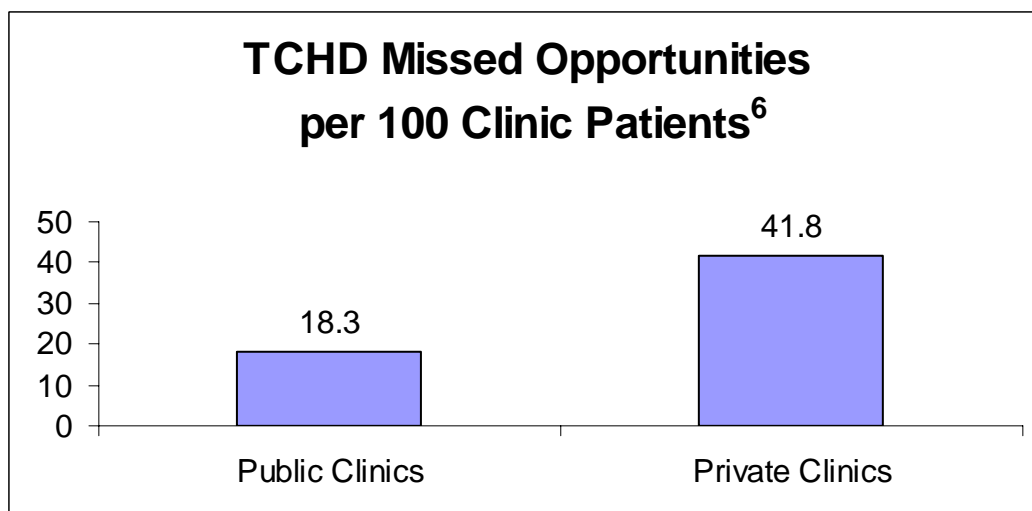
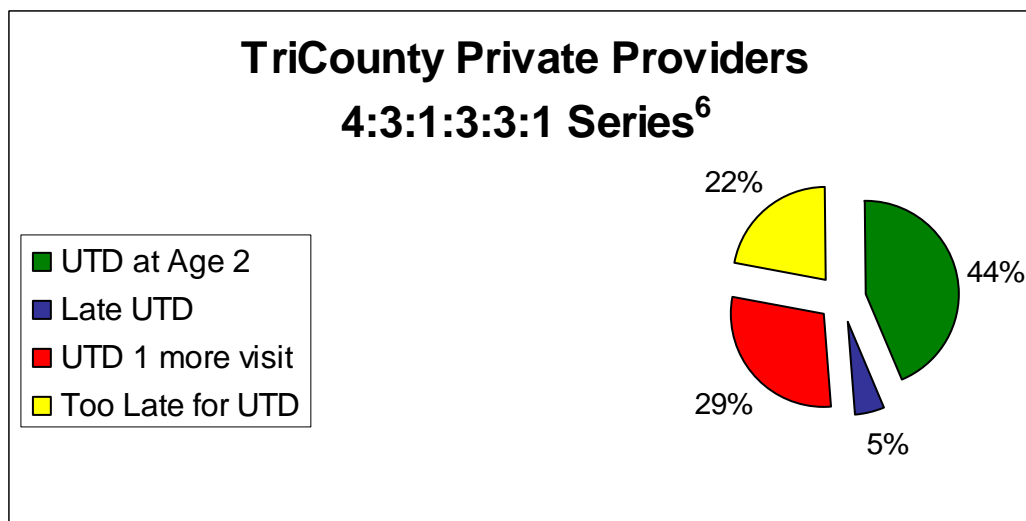
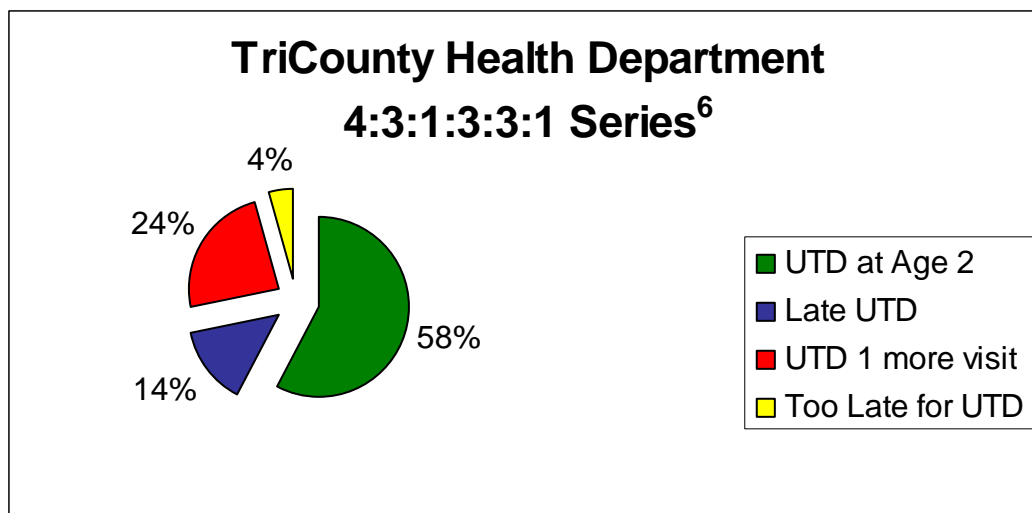
| | 2007 | | 2006 |
|---------------------------|----------------|-------------------------|-------------------------|
| Provider Type | Point Estimate | 95% Confidence Interval | 95% Confidence Interval |
| All VFC Private Providers | 43.6% | 37.6%, 49.6% | 35.9%, 47.7% |
| FQHC/RHC | NA | NA | NA |
| Local Health Departments | 57.7% | 45.5%, 69.9% | 62.3%, 75.9% |

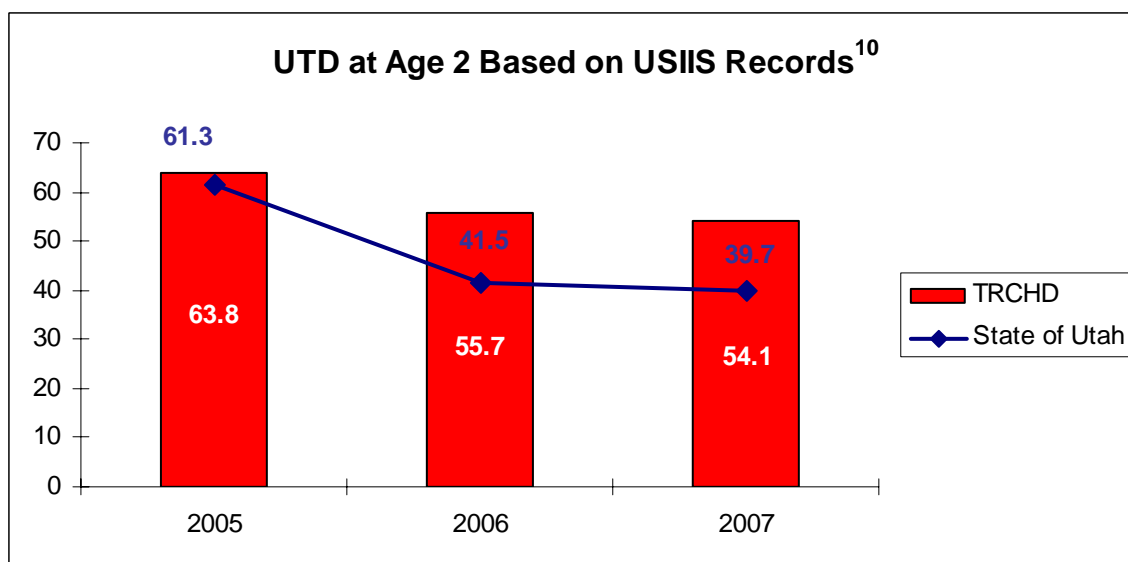
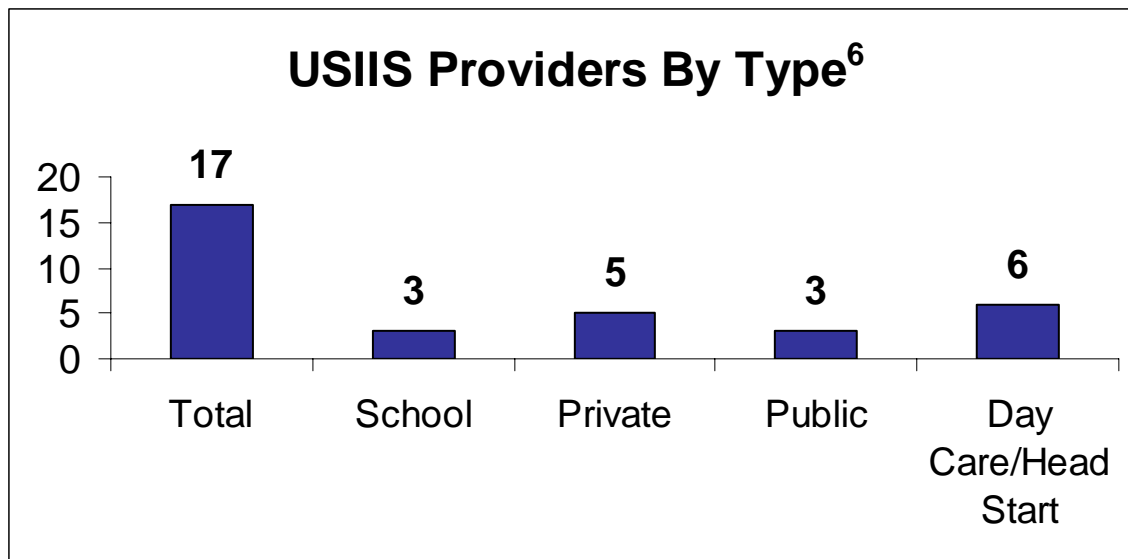
Health Care 2007

| Providers/Facilities | Number |
|---|--------|
| Private VFC Providers ⁶ | 5 |
| Public School Nurses (FTE) ¹⁴ | 1.77 |
| Charter School Nurses (FTE) ¹⁴ | 0 |
| Public Medical Clinics ⁶ | 1 |
| Hospitals ⁷ | 3 |
| Long-term Care and Assisted Living Centers ⁸ | 5 |
| Local Health District Offices ⁶ | 4 |

TriCounty LHD CASA UTD at Age 2 4:3:1:3:3:1 2003-2007⁶







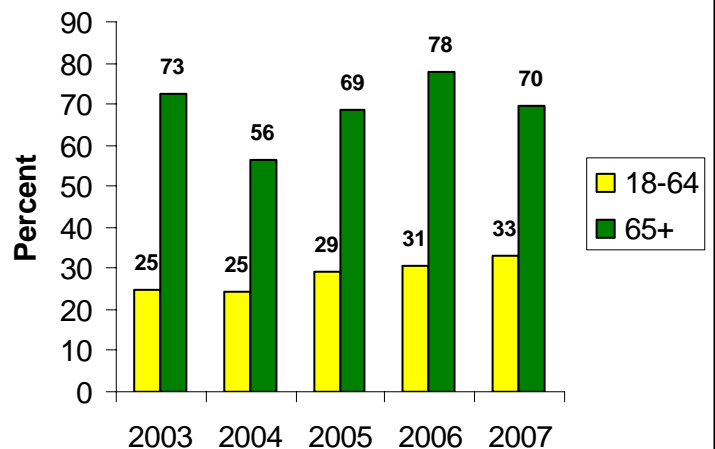
Adequately Immunized by School District 2007⁶

| TriCounty | Daggett | | Duchesne | | Uintah | |
|----------------------------|----------------------|------------------|----------------------|------------------|----------------------|------------------|
| | Adequately Immunized | Total Exemptions | Adequately Immunized | Total Exemptions | Adequately Immunized | Total Exemptions |
| Kindergarten School Entry | 77.8% | 0% | 89.8% | 2.5% | 88.7% | 3.7% |
| Second-Dose Measles (K-12) | 98.7% | 1.3% | 97.3% | 1.8% | 98.1% | 1.7% |
| 7th Grade Entry | 100% | 0% | 55.6% | 1.6% | 95.2% | 4.8% |

Child & School Health 2007

| Group | Clinics/ Facilities | Enrollment |
|---------------------------------------|------------------------|------------|
| WIC Women ¹¹ | 2 | 188 |
| WIC Infants ¹¹ | 2 | 181 |
| WIC Children ¹¹ | 2 | 248 |
| Child Care ¹² | 9 | 629 |
| Head Start ¹³ | 8 | 262 |
| Public Schools ¹⁴ | 31 | 10,310 |
| Private/Charter Schools ¹⁴ | 1 | 62 |

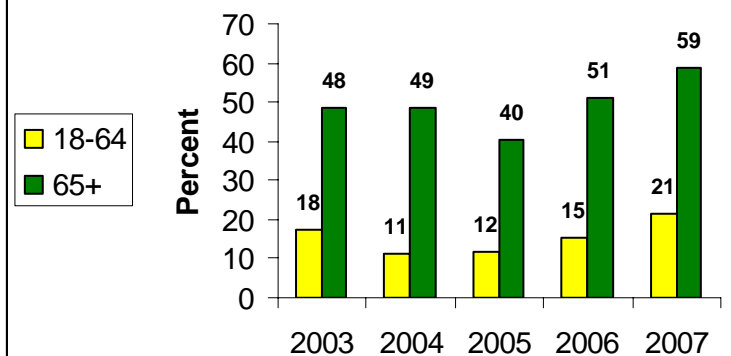
Influenza* Vaccinations 2003-2007¹⁵



Immunized for Child Care 2007⁶

| TriCounty | Adequately Immunized | Total Exemptions |
|--------------------------------------|----------------------|------------------|
| Child Care Facilities and Preschools | 90.1% | 3.3% |
| Head Start Centers | 68.7% | 0% |

Pneumococcal* Vaccinations 2003-2007¹⁵



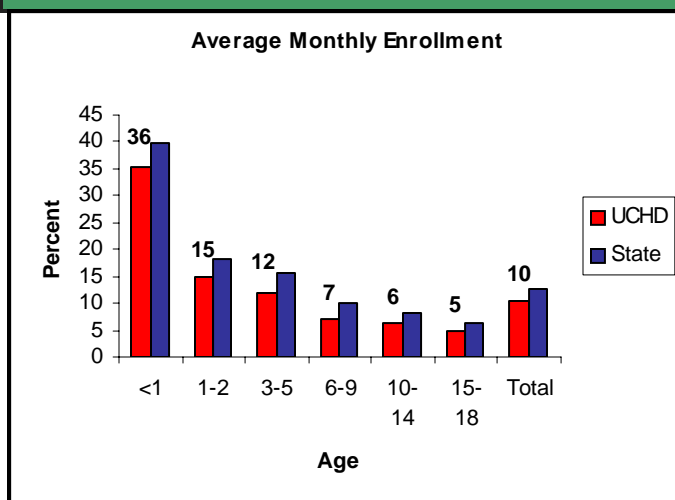
*Influenza=within past 12 months, pneumococcal=ever had

| Population 2007 ¹ | Number | % of Total |
|--------------------------------|----------------|--------------|
| Total Population | 501,447 | |
| 17 and Under | 171,721 | 34.2% |
| 18 to 34 | 173,513 | 34.6% |
| 35 to 49 | 76,512 | 15.3% |
| 50 to 64 | 51,574 | 10.3% |
| 65 and Over | 28,127 | 5.6% |
| Poverty 2006-2007 ² | Number | % of Total |
| Total 0-100% Poverty | 52,800 | 10.8% |
| 17 and Under | 22,400 | 13.4% |
| 18 to 34 | 20,600 | 12.1% |
| 35 to 49 | 6,300 | 8.5% |
| 50 to 64 | 2,500 | 5.1% |
| 65 and Over | ** | ** |
| Total 101-200% Poverty | 126,400 | 25.9% |
| 17 and Under | 48,300 | 28.9% |
| 18 to 34 | 46,200 | 27.1% |
| 35 to 49 | 16,500 | 22.3% |
| 50 to 64 | 6,700 | 13.6% |
| 65 and Over | 7,700 | 27.8% |



| Population 2007 ¹ | Number | % of Total |
|------------------------------|----------------|------------|
| Total 0-18 | 181,638 | |
| <1 | 12,037 | 6.6% |
| 1-2 | 23,143 | 12.7% |
| 3-5 | 33,617 | 18.5% |
| 6-9 | 39,791 | 21.9% |
| 10-14 | 39,952 | 22.0% |
| 15-18 | 33,098 | 18.2% |

Medicaid Eligible Population by Age 2007⁵



| Uninsured 2006-2007 ³ | Number | % of Total |
|--------------------------------------|---------------|--------------|
| Total Uninsured (0-64) | 59,300 | 12.9% |
| 17 and Under | 18,800 | 11.2% |
| 18 to 34 | 28,100 | 16.5% |
| 35 to 49 | 10,100 | 13.6% |
| 50 to 64 | 2,300 | 4.7% |
| Selected Insurance Type ⁴ | Number | % of Total |
| Medicare | 38,700 | 9.0% |
| CHIP* | 6,800 | 4.2% |

*Children's Health Insurance Program, Ages 0 to 18

CoCASA: Up-to-Date at Age Two by Antigen 2007⁶

| | 4 DTaP | 3 Polio | 1 MMR | 3 Hib | 3 Hep B | 1 Varicella | 4:3:1:3:3:1 | 95% Confidence Interval |
|---------------|--------|---------|-------|-------|---------|-------------|-------------|-------------------------|
| All Providers | 69.4% | 82.5% | 84.2% | 85.1% | 75.3% | 76.3% | 56.0% | 52.7%, 59.4% |

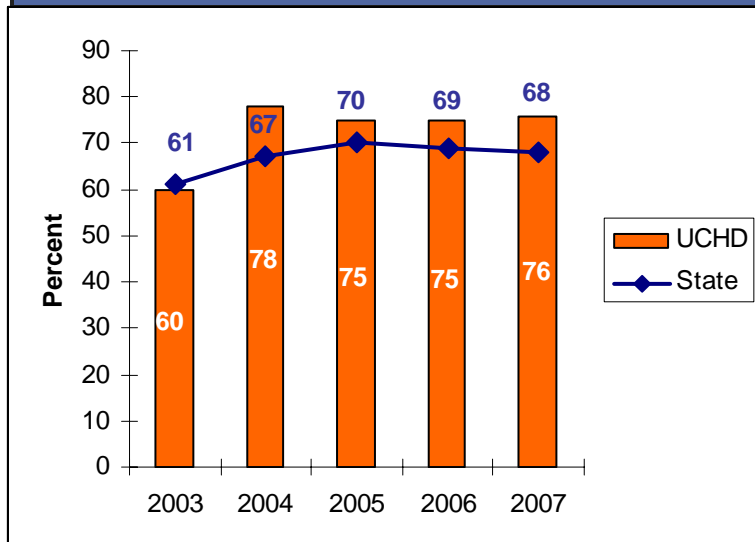
Up-to-Date at Age Two (4:3:1:3:3:1)⁶ 2007

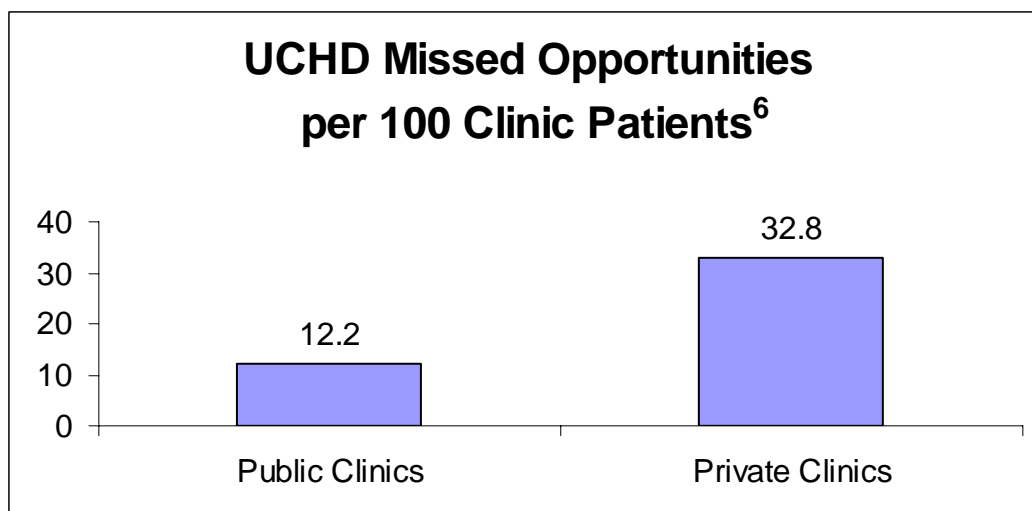
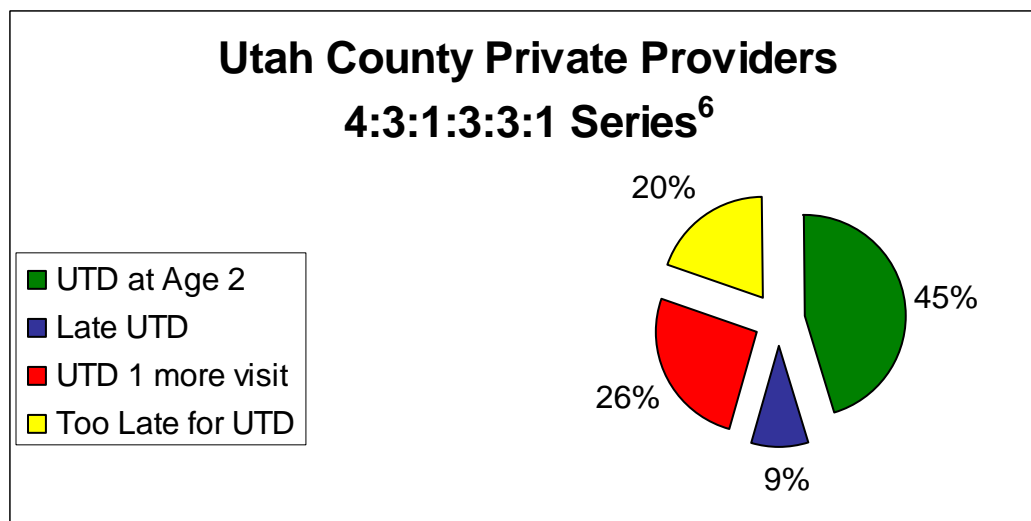
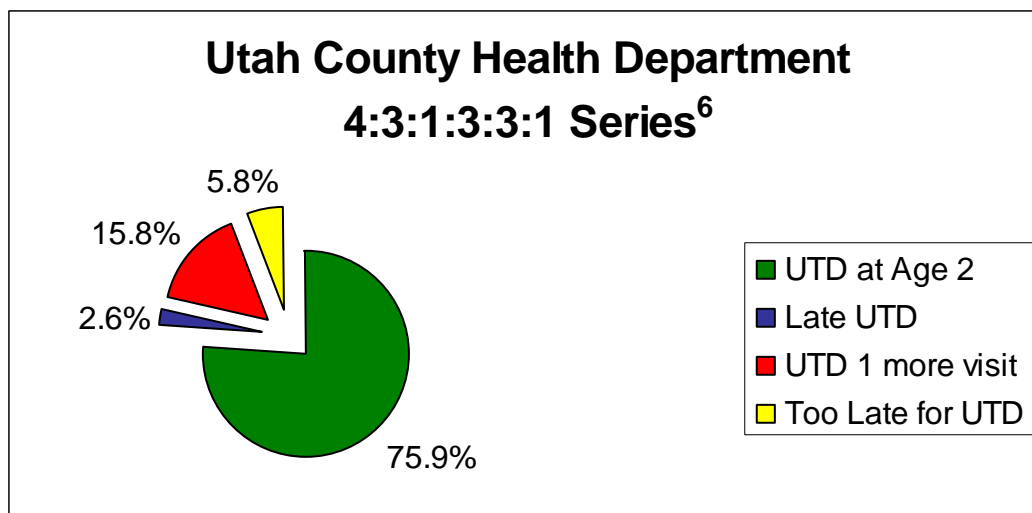
| | 2007 | | 2006 |
|---------------------------|----------------|-------------------------|-------------------------|
| Provider Type | Point Estimate | 95% Confidence Interval | 95% Confidence Interval |
| All VFC Private Providers | 44.9% | 40.7%, 49.1% | 35.1%, 45.1% |
| FQHC/RHC | NA | NA | NA |
| Local Health Departments | 75.9% | 71.0%, 80.8% | 70.6%, 78.4% |

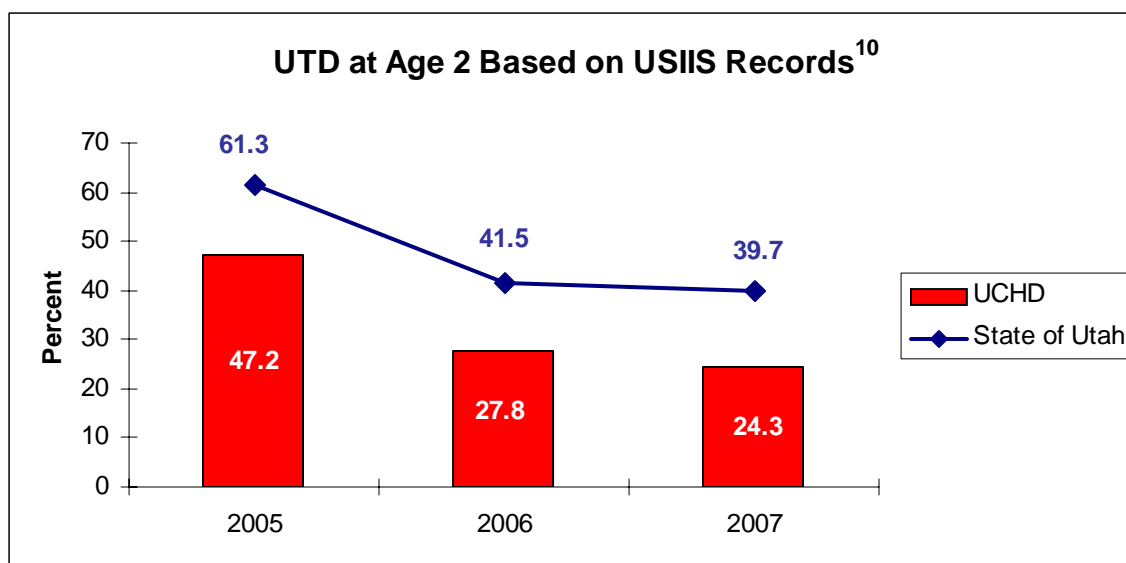
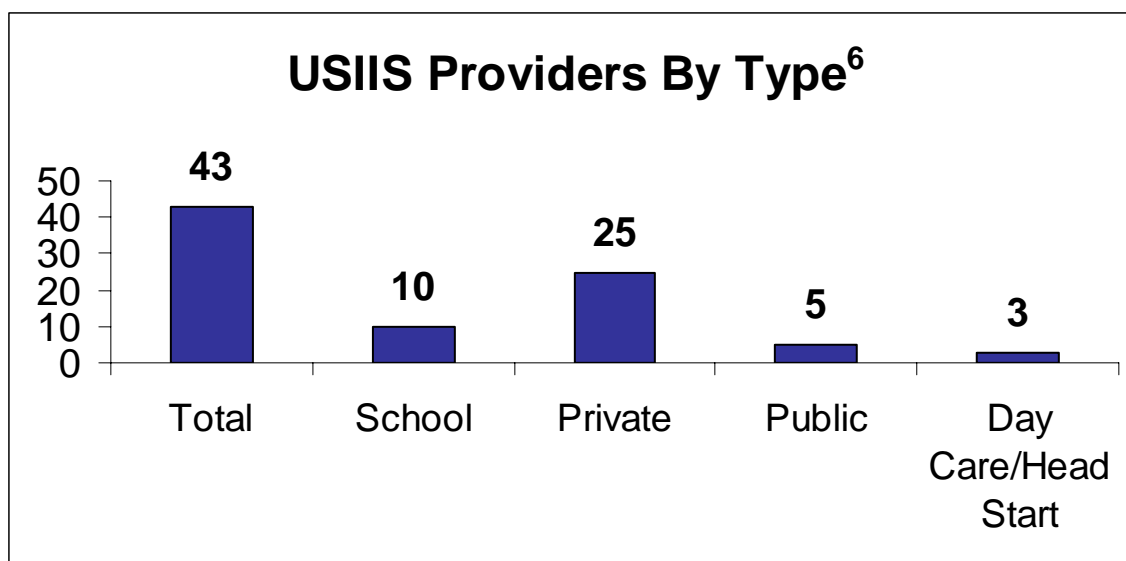
Health Care 2007

| Providers/Facilities | Number |
|---|--------|
| Private VFC Providers ⁶ | 40 |
| Public School Nurses (FTE) ¹⁴ | 24.75 |
| Charter School Nurses (FTE) ¹⁴ | 4.5 |
| Public Medical Clinics ⁶ | 3 |
| Hospitals ⁷ | 8 |
| Long-term Care and Assisted Living Centers ⁸ | 61 |
| Local Health District Offices ⁶ | 4 |

Utah County LHD CASA UTD at Age 2 4:3:1:3:3:1 2003-2007⁶







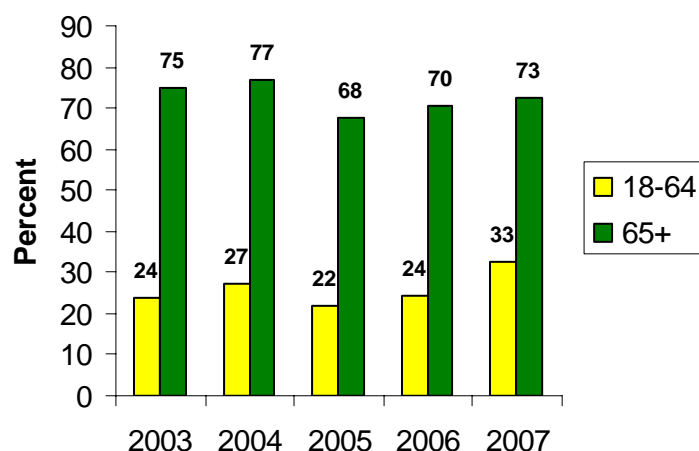
Adequately Immunized by School District 2007⁶

| Utah County | Alpine | | Nebo | | Provo | |
|----------------------------|----------------------|------------------|----------------------|------------------|----------------------|------------------|
| | Adequately Immunized | Total Exemptions | Adequately Immunized | Total Exemptions | Adequately Immunized | Total Exemptions |
| Kindergarten School Entry | 82.4% | 4.0% | 82.2% | 4.7% | 81.6% | 4.4% |
| Second-Dose Measles (K-12) | 96.3% | 3.4% | 93.9% | 4.1% | 96.3% | 3.1% |
| 7th Grade Entry | 91.6% | 4.9% | 91.1% | 3.9% | 90.2% | 3.8% |

Child & School Health 2007

| Group | Clinics/ Facilities | Enrollment |
|---------------------------------------|------------------------|------------|
| WIC Women ¹¹ | 4 | 3,422 |
| WIC Infants ¹¹ | 4 | 2,936 |
| WIC Children ¹¹ | 4 | 5,734 |
| Child Care ¹² | 68 | 3,766 |
| Head Start ^{+, 13} | 12 | 994 |
| Public Schools ¹⁴ | 138 | 98,336 |
| Private/Charter Schools ¹⁴ | 31 | 9,962 |

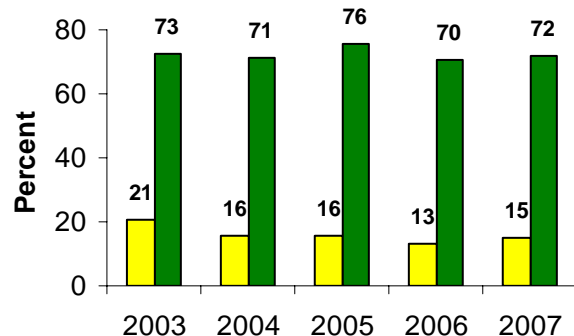
Influenza* Vaccinations 2003-2007¹⁵



Immunized for Child Care 2006⁶

| Utah County | Adequately Immunized | Total Exemptions |
|--------------------------------------|----------------------|------------------|
| Child Care Facilities and Preschools | 88.7% | 2.1% |
| Head Start Centers ⁺ | 91.6% | 1.8% |

Pneumococcal* Vaccinations 2003-2007¹⁵



* Head Start data for WCHD included in UCHD

* Influenza=within past 12 months, pneumococcal=ever had

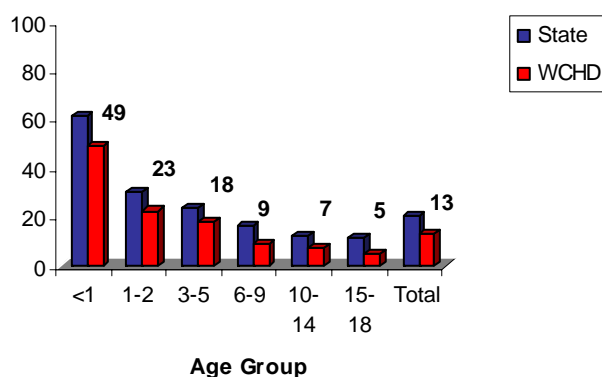
| Population 2007 ¹ | Number | % of Total |
|--------------------------------|---------------|--------------|
| Total Population | 21,951 | |
| 17 and Under | 6,637 | 30.2% |
| 18 to 34 | 5,888 | 26.8% |
| 35 to 49 | 4,457 | 20.3% |
| 50 to 64 | 3,294 | 15.0% |
| 65 and Over | 1,675 | 7.6% |
| Poverty 2006-2007 ² | Number | % of Total |
| Total 0-100% Poverty | 2,000 | 9.1% |
| 17 and Under | 800 | 11.7% |
| 18 to 34 | 700 | 11.4% |
| 35 to 49 | 300 | 6.6% |
| 50 to 64 | 100 | 4.0% |
| 65 and Over | ** | ** |
| Total 101-200% Poverty | 4,900 | 22.8% |
| 17 and Under | 1,800 | 27.8% |
| 18 to 34 | 1,600 | 28.4% |
| 35 to 49 | 900 | 19.6% |
| 50 to 64 | 200 | 6.5% |
| 65 and Over | 200 | 12.1% |



| Population 2007 ¹ | Number | % of Total |
|------------------------------|--------------|------------|
| Total 0-18 | 7,017 | |
| <1 | 403 | 5.7% |
| 1-2 | 782 | 11.1% |
| 3-5 | 1,240 | 17.7% |
| 6-9 | 1,404 | 20.0% |
| 10-14 | 1,716 | 24.5% |
| 15-18 | 1,472 | 21.0% |

Medicaid Eligible Population by Age 2006[#]

WCHD Medicaid Eligible 0-18 = 936



| Uninsured 2006-2007 ³ | Number | % of Total |
|--------------------------------------|--------------|--------------|
| Total Uninsured (0-64) | 2,700 | 13.6% |
| 17 and Under | 700 | 10.9% |
| 18 to 34 | 1,200 | 20.6% |
| 35 to 49 | 600 | 12.8% |
| 50 to 64 | 200 | 5.4% |
| Selected Insurance Type ⁴ | Number | % of Total |
| Medicare | 1,900 | 9.7% |
| CHIP [*] | ** | ** |

[#]2007 Wasatch County Medicaid not yet available. 2006 data reported.

^{*}Children's Health Insurance Program, Ages 0 to 18

CoCASA: Up-to-Date at Age Two by Antigen 2007⁶

| | 4 DTaP | 3 Polio | 1 MMR | 3 Hib | 3 Hep B | 1 Varicella | 4:3:1:3:3:1 | 95% Confidence Interval |
|---------------|--------|---------|-------|-------|---------|-------------|-------------|-------------------------------|
| All Providers | 81.6% | 86.4% | 85.7% | 90.5% | 83.0% | 86.4% | 72.1% | 64.5%, 79.7% |

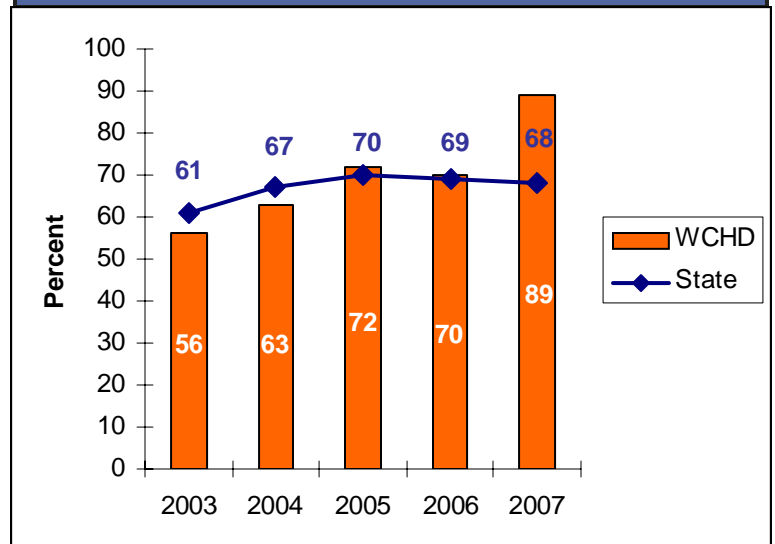
Up-to-Date at Age Two (4:3:1:3:3:1)⁶ 2007

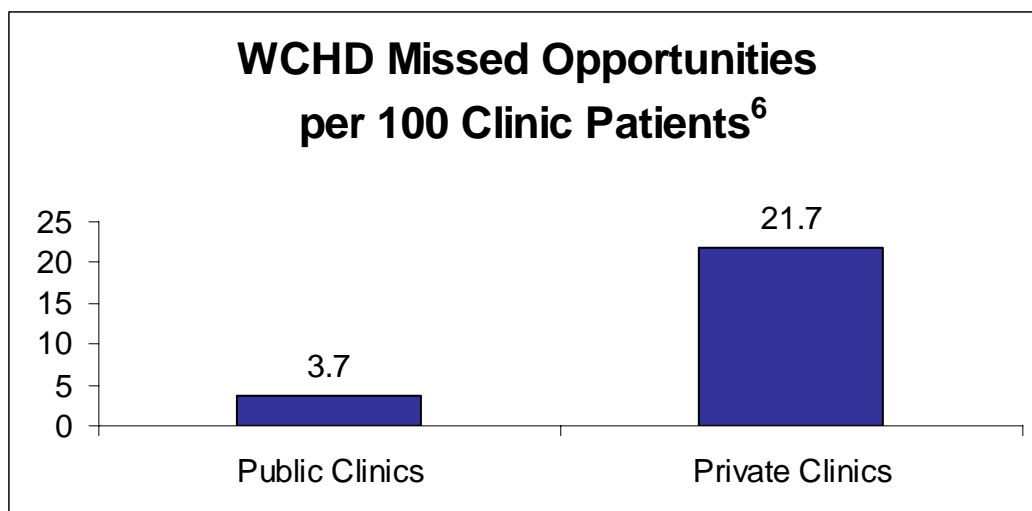
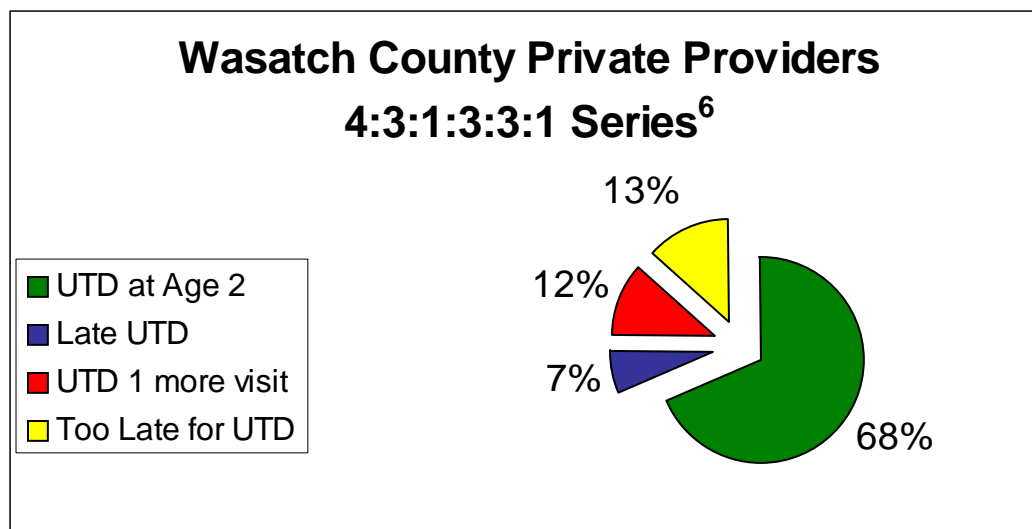
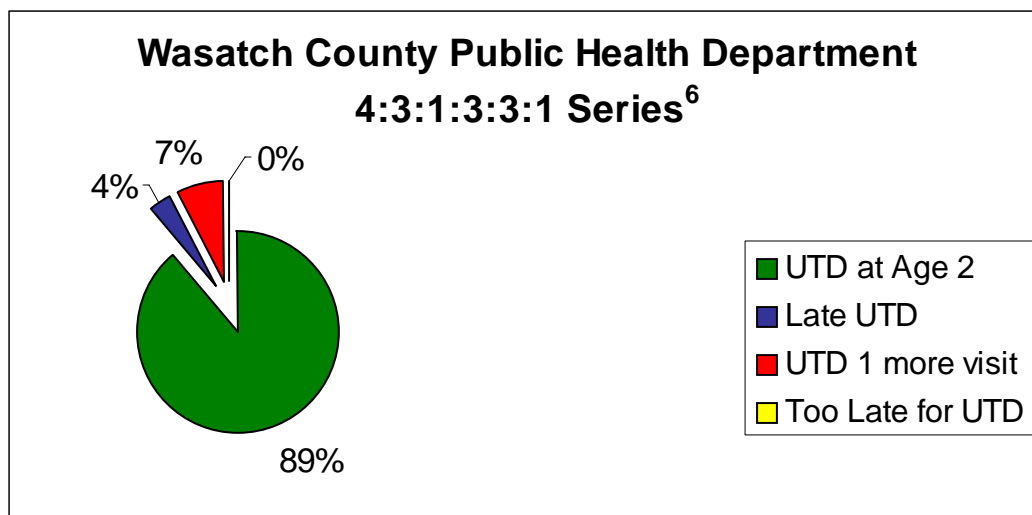
| | 2007 | | 2006 |
|---------------------------|----------------|-------------------------|-------------------------|
| Provider Type | Point Estimate | 95% Confidence Interval | 95% Confidence Interval |
| All VFC Private Providers | 68.3% | 59.6%, 77.1% | 47.9%, 63.7% |
| FQHC/RHC | NA | NA | NA |
| Local Health Departments | 88.9% | 72.0%, 96.1% | 57.0%, 82.1% |

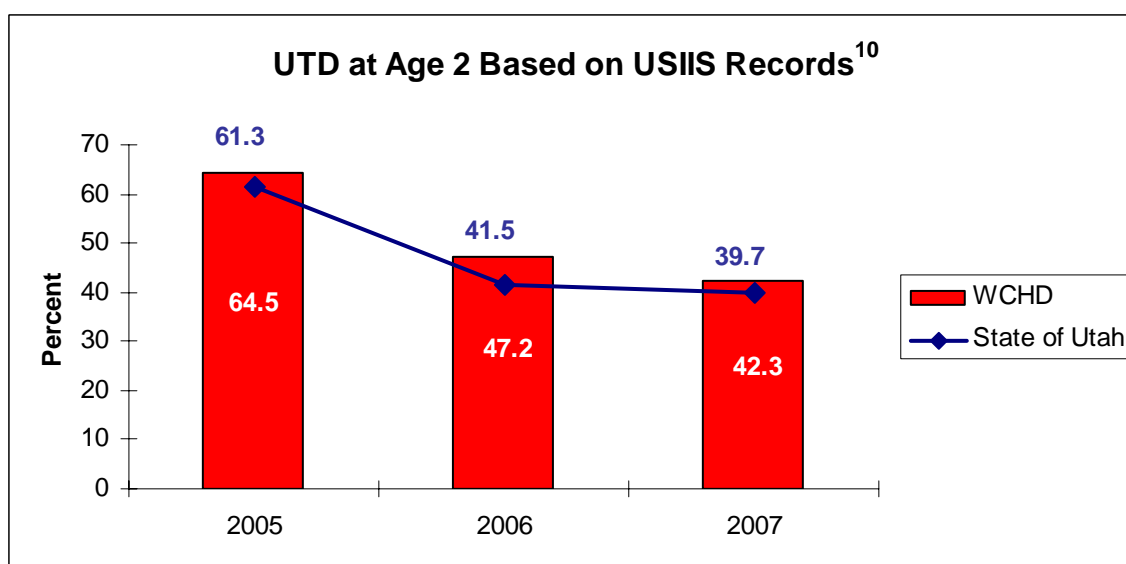
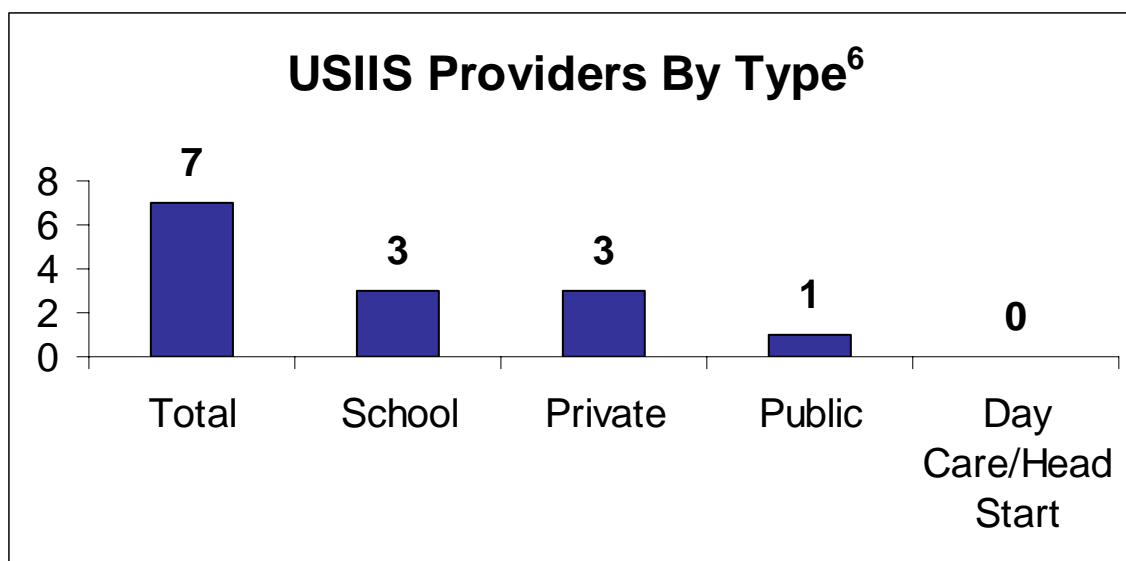
Health Care 2007

| Providers/Facilities | Number |
|---|--------|
| Private VFC Providers ⁶ | 3 |
| Public School Nurses (FTE) ¹⁴ | 0.75 |
| Charter School Nurses (FTE) ¹⁴ | 0 |
| Public Medical Clinics ⁶ | 0 |
| Hospitals ⁷ | 1 |
| Long-term Care and Assisted Living Centers ⁸ | 1 |
| Local Health District Offices ⁶ | 1 |

Wasatch County LHD CASA UTD at Age 2 4:3:1:3:3:1 2003-2007⁶







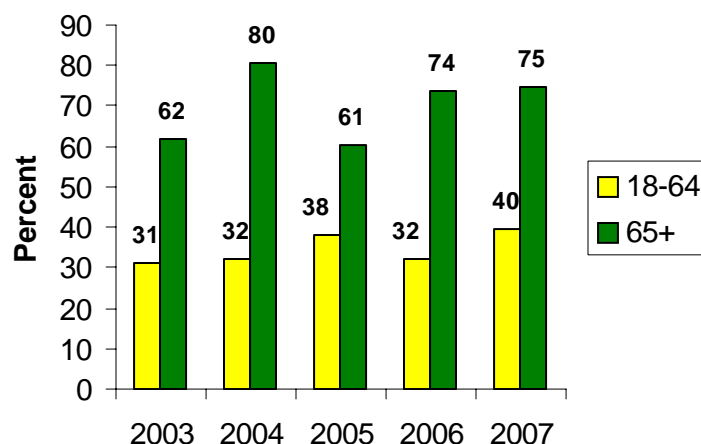
Adequately Immunized by School District 2007⁶

| Wasatch | Wasatch | |
|----------------------------|----------------------|------------------|
| | Adequately Immunized | Total Exemptions |
| Kindergarten School Entry | 76.1% | 2.6% |
| Second-Dose Measles (K-12) | 95.5% | 3.9% |
| 7th Grade Entry | 67.7% | 1.9% |

Child & School Health 2007

| Group | Clinics/ Facilities | Enrollment |
|--|------------------------|------------|
| WIC Women ¹¹ | 1 | 116 |
| WIC Infants ¹¹ | 1 | 109 |
| WIC Children ¹¹ | 1 | 183 |
| Child Care ¹² | 5 | 159 |
| Head Start ^{+, 13} | + | + |
| Public Schools ¹⁴ | 8 | 4,588 |
| Private/Charter Schools ¹⁴ | 1 | 143 |

Influenza* Vaccinations 2003-2007¹⁵

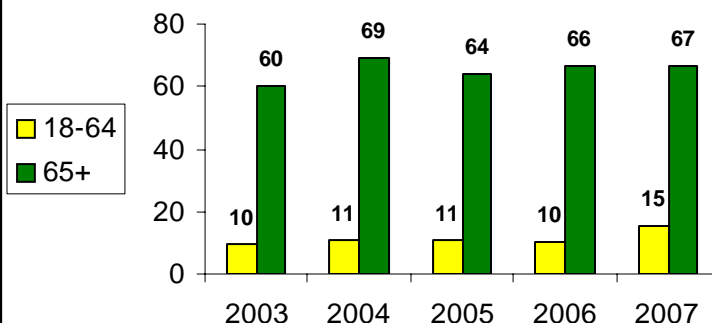


*Data for Wasatch Head Start reported with Utah County.

Immunized for Child Care 2007⁶

| Wasatch | Adequately Immunized | Total Exemptions |
|--|---------------------------|---------------------------|
| Child Care Facilities and Preschools | 73.6% | 1.3% |
| Head Start Centers ⁺ | Reported in Utah Co HS | Reported in Utah Co HS |

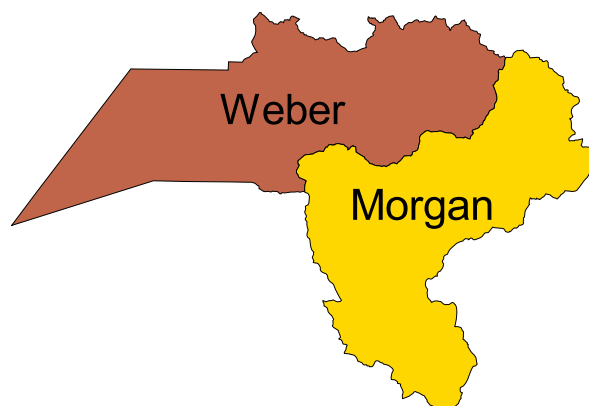
Pneumococcal* Vaccinations 2003-2007¹⁵



* Head Start data for WCHD are Included in UCHD.

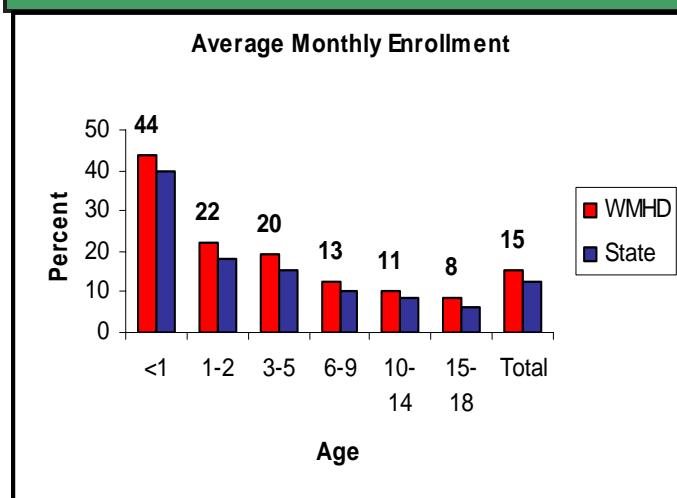
*Influenza=within past 12 months, pneumococcal=ever had

| Population 2007 ¹ | Number | % of Total |
|--------------------------------|----------------|--------------|
| Total Population | 230,046 | |
| 17 and Under | 69,216 | 30.1% |
| 18 to 34 | 61,463 | 26.7% |
| 35 to 49 | 43,050 | 18.7% |
| 50 to 64 | 33,751 | 14.7% |
| 65 and Over | 22,566 | 9.8% |
| Poverty 2006-2007 ² | Number | % of Total |
| Total 0-100% Poverty | 18,000 | 7.9% |
| 17 and Under | 6,900 | 10.0% |
| 18 to 34 | 4,900 | 8.1% |
| 35 to 49 | 3,500 | 8.3% |
| 50 to 64 | ** | ** |
| 65 and Over | 2,500 | 11.0% |
| Total 101-200% Poverty | 51,200 | 22.5% |
| 17 and Under | 17,400 | 25.4% |
| 18 to 34 | 16,300 | 26.9% |
| 35 to 49 | 8,600 | 20.0% |
| 50 to 64 | 5,000 | 15.1% |
| 65 and Over | 2,900 | 12.9% |



| Population 2007 ¹ | Number | % of Total |
|------------------------------|----------------|--------------|
| Total 0-18 | 72,756 | |
| <1 | 4,281 | 5.9% |
| 1-2 | 8,221 | 11.3% |
| 3-5 | 12,460 | 17.1% |
| 6-9 | 15,654 | 21.5% |
| 10-14 | 17,853 | 24.5% |
| 15-18 | 14,287 | 19.6% |
| Population 2007 ¹ | Number | % of Total |
| Morgan | 9,265 | 4.0% |
| Weber | 220,781 | 96.0% |

Medicaid Eligible Population by Age 2007⁵



| Uninsured 2006-2007 ³ | Number | % of Total |
|--------------------------------------|---------------|--------------|
| Total Uninsured (0-64) | ** | ** |
| 17 and Under | 3,600 | 5.3% |
| 18 to 34 | 8,700 | 14.3% |
| 35 to 49 | 3,800 | 9.0% |
| 50 to 64 | ** | ** |
| Selected Insurance Type ⁴ | Number | % of Total |
| Medicare | 28,800 | 12.8% |
| CHIP* | 3,100 | 4.3% |

*Children's Health Insurance Program, Ages 0 to 18

CoCASA: Up-to-Date at Age Two by Antigen 2007⁶

| | 4 DTap | 3 Polio | 1 MMR | 3 Hib | 3 Hep B | 1 Varicella | 4:3:1:3:3:1 | 95% Confidence Interval |
|----------------------|--------|---------|-------|-------|---------|-------------|-------------|-------------------------------|
| <i>All Providers</i> | 69.2% | 86.2% | 84.4% | 85.8% | 82.6% | 82.1% | 62.1% | 58.5%, 65.8% |

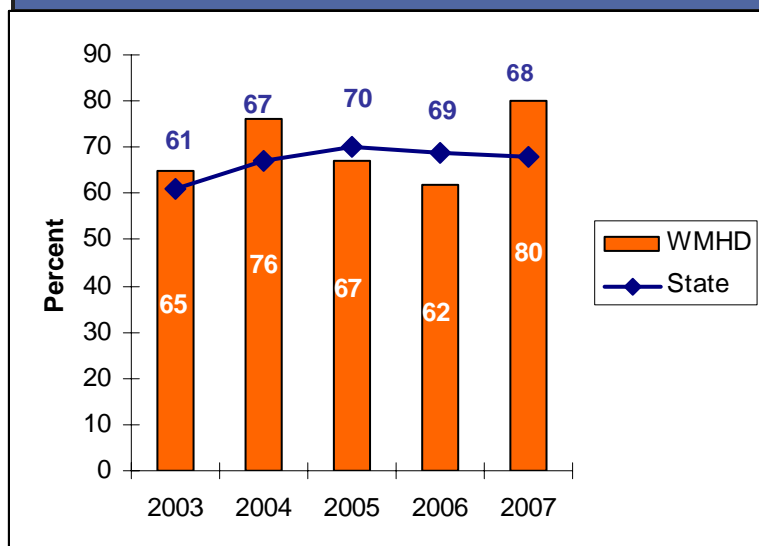
Up-to-Date at Age Two (4:3:1:3:3:1)⁶ 2007

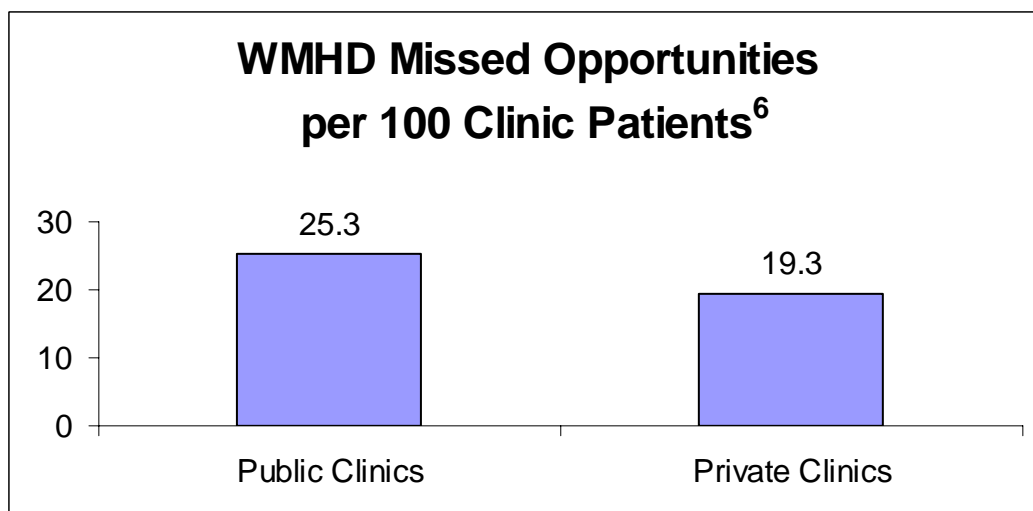
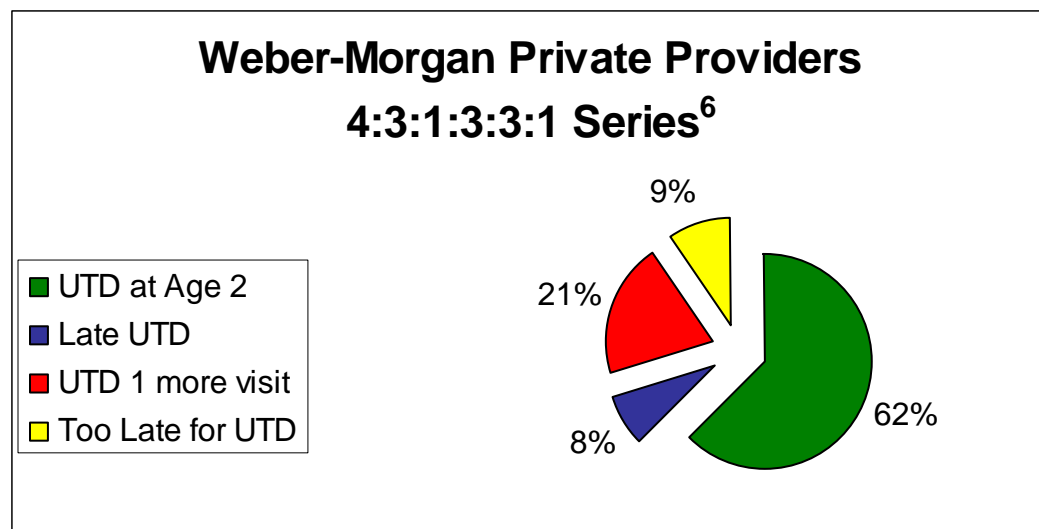
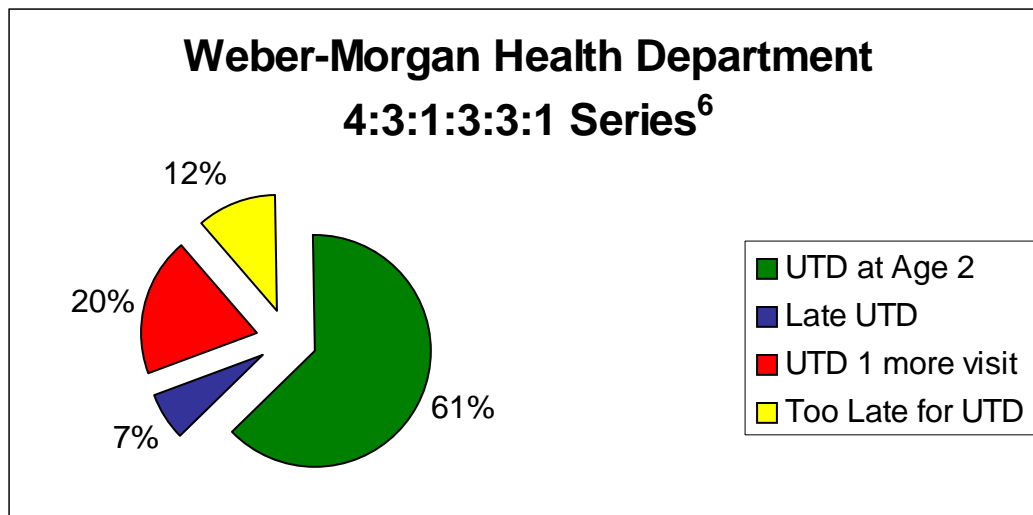
| | 2007 | | 2006 |
|---------------------------|----------------|-------------------------|-------------------------|
| Provider Type | Point Estimate | 95% Confidence Interval | 95% Confidence Interval |
| All VFC Private Providers | 62.1% | 58.2%, 66.0% | 51.2%, 61.4% |
| FQHC/RHC | 4.8% | 0.8%, 22.7% | NA |
| Local Health Departments | 80.3% | 69.9%, 90.7% | 52.4%, 68.2% |

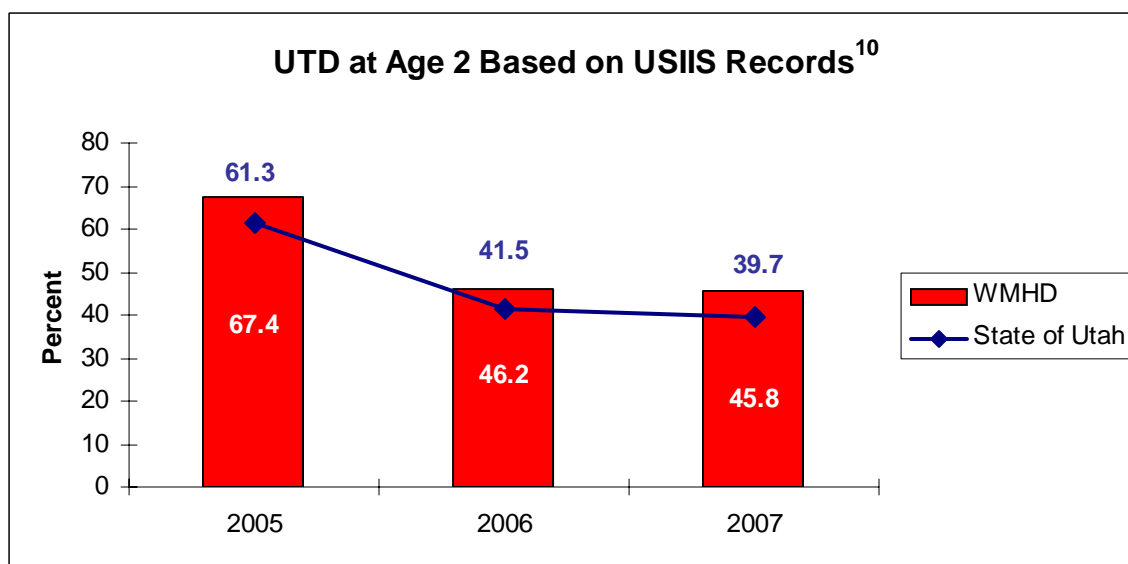
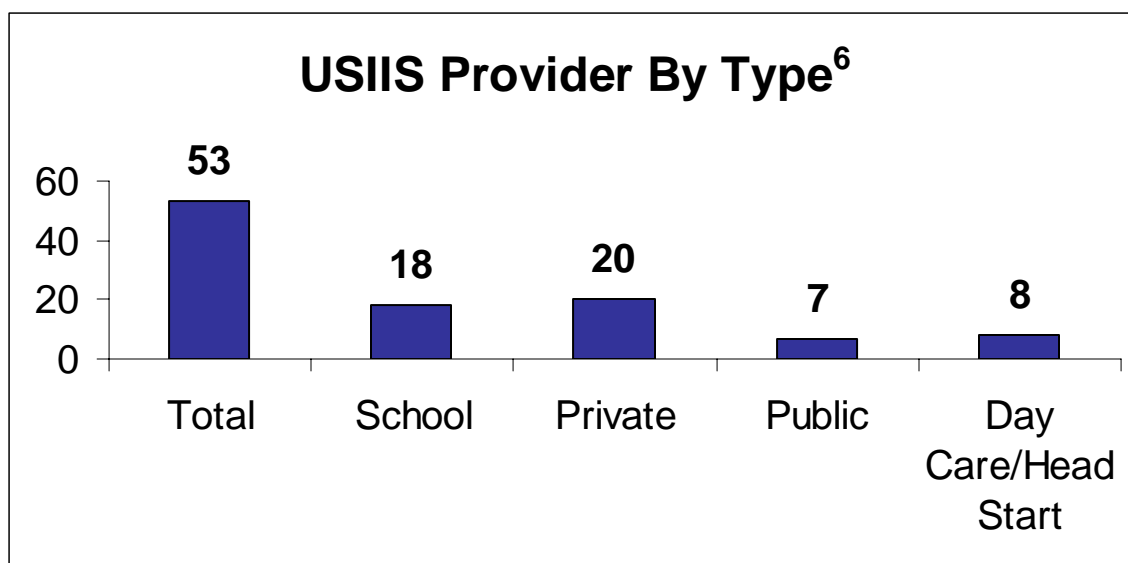
Health Care 2007

| Providers/Facilities | Number |
|---|--------|
| Private VFC Providers ⁶ | 21 |
| Public School Nurses (FTE) ¹⁴ | 11.25 |
| Charter School Nurses (FTE) ¹⁴ | 0 |
| Public Medical Clinics ⁶ | 7 |
| Hospitals ⁷ | 3 |
| Long-term Care and Assisted Living Centers ⁸ | 22 |
| Local Health District Offices ⁶ | 1 |

Weber-Morgan LHD CASA UTD at Age 2 4:3:1:3:3:1 2003-2007⁶







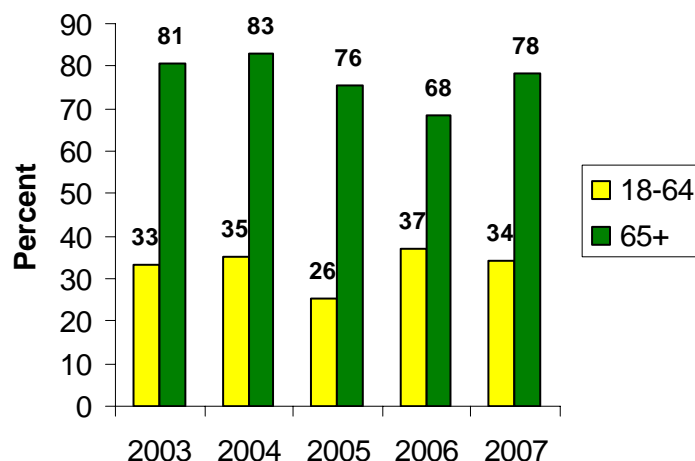
Adequately Immunized by School District 2007⁶

| Weber-Morgan | Morgan | | Ogden | | Weber | |
|---------------------------|----------------------|------------------|----------------------|------------------|----------------------|------------------|
| | Adequately Immunized | Total Exemptions | Adequately Immunized | Total Exemptions | Adequately Immunized | Total Exemptions |
| Kindergarten School Entry | 89.0% | 3.1% | 91.7% | 1.1% | 88.1% | 2.0% |
| Second-Dose Measles(K-12) | 97.5% | 1.8% | 97.4% | 0.9% | 98.4% | 1.4% |
| 7th Grade Entry | 99.4% | 0.6% | 98.9% | 0.7% | 96.5% | 2.4% |

Child & School Health 2007

| Group | Clinics/ Facilities | Enrollment |
|---------------------------------------|------------------------|------------|
| WIC Women ¹¹ | 1.6 | 1,618 |
| WIC Infants ¹¹ | 1.6 | 1,627 |
| WIC Children ¹¹ | 1.6 | 2,966 |
| Child Care ¹² | 42 | 2,878 |
| Head Start ¹³ | 13 | 649 |
| Public Schools ¹⁴ | 76 | 44,883 |
| Private/Charter Schools ¹⁴ | 12 | 2,297 |

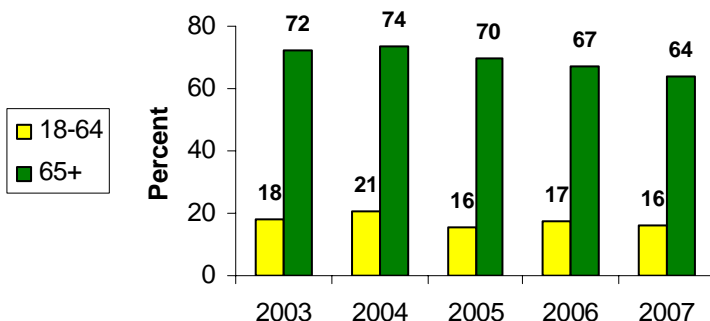
Influenza* Vaccinations 2003-2007¹⁵



Immunized for Child Care 2007⁶

| Weber-Morgan | Adequately Immunized | Total Exemptions |
|--------------------------------------|----------------------|------------------|
| Child Care Facilities and Preschools | 93.2% | 1.5% |
| Head Start Centers ⁺ | 98.6% | 0.5% |

Pneumococcal* Vaccinations 2003-2007¹⁵



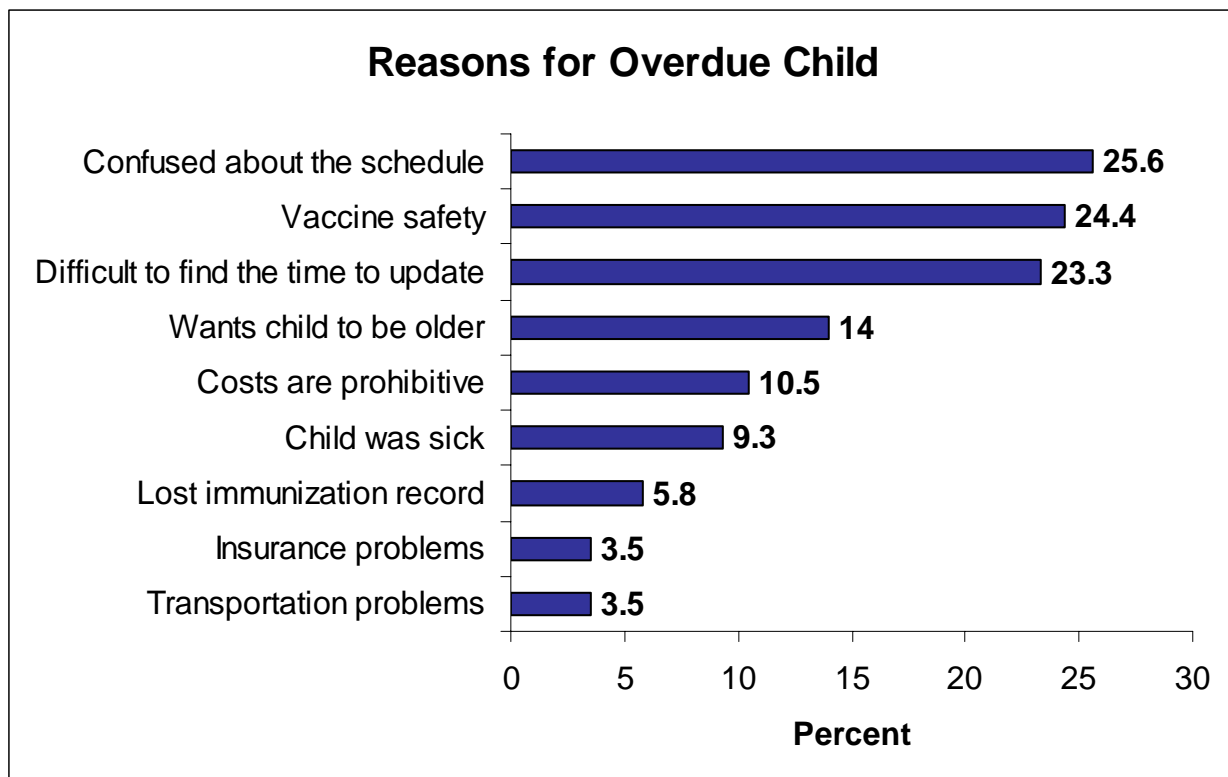
* Head Start data for WMHD include data for Weber County only. Morgan County data included in DCHD.

*Influenza=within past 12 months, pneumococcal=ever had

A hesitancy questionnaire was developed in 2007 by researchers at Brigham Young University (BYU) to assess parental attitudes, beliefs, and behaviors among those who hesitate immunizing their children in Utah County. Questions were chosen based on commonly identified parental concerns and other perceived barriers such as access to immunizations and insurance coverage (Kim, Kronenfeld, Frimpong & Rivers, 2007). In addition, the questionnaire was reviewed by a local immunization coalition consisting of experts in public health, pediatrics, and state and local government agencies.

The hesitancy questionnaire was distributed to eligible parents by local pediatric and family practice offices and by the area's local health department. To be eligible, the parent(s) needed to be present in the clinic with a child who needed a minimum of one immunization that was at least six months overdue. The point of contact was either nurses or medical assistants at participating pediatrics offices or the local health department. Parents who matched the inclusion criteria were identified and offered a questionnaire with an accompanying consent form.

The single-page immunization questionnaire included three questions regarding why the parent(s) hesitated to immunize their child, what the parents' concerns were regarding immunizations, and where they received the majority of their information regarding immunizations. The questionnaire also asked 11 demographic questions. Demographic data gathered included gender, age, and race of the parent completing the questionnaire. In addition, parents were asked about their level of education, household income, and whether the household income was a single or dual income. The primary results are found below. Additional results and demographic information can be found on page 67.

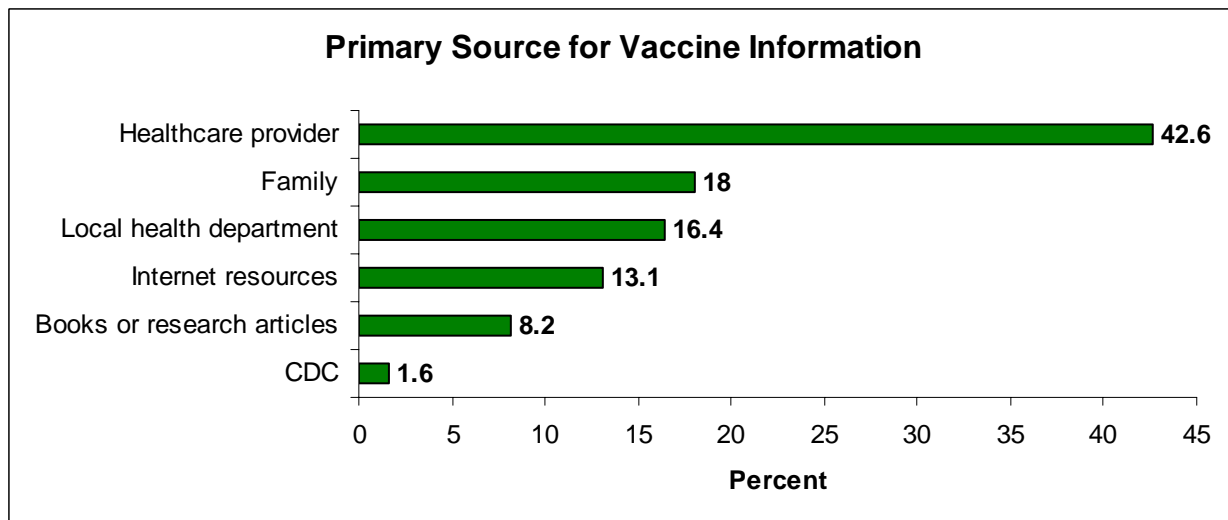
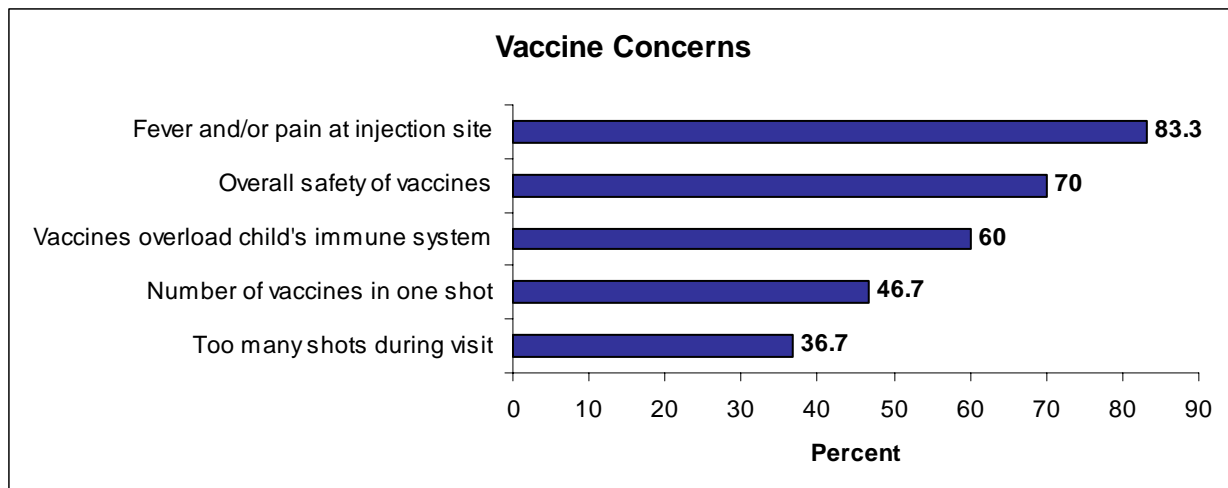


Demographics

Of the 86 subjects sampled, 71 reported gender, with 70 (98.6%) being female and one (1.4%) male. The subjects' average age was 30, with a range of 20 to 45. Of the 69 who reported education, most had some college experience, with 27.7% reporting graduating from college. 13.8% of respondents stated they had at least a high school education, with 6.2% stating they had only some high school education. Of the 67 who answered income questions, the mean household income was slightly less than \$45,000.

Sixty-seven subjects reported race. Most of the subjects who reported race were white (68.7%), with Hispanics the next highest at 23.9%. Additionally, reported races were Hawaiian or Pacific Islander (1.5%) or those who subclassified as 'other' (6%). The number of children in a family ranged between one and eight children, with the mean at 3.14 (SD 1.6). The age of the child overdue for immunizations ranged from six months to 17 years with an average age of 3.5 years. When asked if they had received immunizations as a child, 91.9% of parents stated they had. Of the 80 participants who reported on insurance coverage, 87.5% stated their insurance program paid for the cost of the immunization. Of the 74 subjects who responded, 73% reported they had received childhood immunization information during the previous visit.

Additional Results



IMMUNIZATION REPORT FOR LONG-TERM CARE FACILITIES

Long-term care facilities are required to report the influenza and pneumococcal immunization status of patients and the influenza and hepatitis B immunization status of employees to the Utah Immunization Program. Completion of the annual report is necessary to prevent sanctioning of a facility's license.

The report includes persons who are residents and employees of a facility between October 1 and December 31 of the survey year. The survey should be completed online no later than January 31 of the following year. Facilities reporting: hospitals (swing beds and transitional care beds); nursing care facilities; small health care facilities; and type I and type II assisted living facilities. Of the 274 care facilities, 269 (98.2%) reported for 2007.

A portion of the survey is reported here:

Influenza (flu) immunizations: given during the report time period

Pneumococcal immunizations: given at any time

Hepatitis B immunizations: given at any time to an employee having direct patient contact

(Note: A percentage in *italics* indicates that there was a statistically significant improvement from the previous year ($p < 0.05$))

STATE OF UTAH**ADULT IMMUNIZATIONS LONG TERM CARE FACILITIES 2007**

| <i>State of Utah</i> | Number | Flu | Pneumococcal | Hepatitis B |
|----------------------------|---------------|--------------|--------------|--------------|
| Facilities | 269 | NA | NA | NA |
| Residents | 14,444 | 71.6% | 44.2% | NA |
| Employees | | | | |
| All | 15,796 | 47.8% | NA | NA |
| Direct Patient Care | 10,807 | NA | NA | 50.3% |

Bear River Health District

| | Number | Flu | Pneumococcal | Hepatitis B |
|---------------------|--------|-------|--------------|-------------|
| Facilities | 21 | NA | NA | NA |
| Residents | 845 | 73.4% | 65.1% | NA |
| Employees All | 1,240 | 46.1% | NA | NA |
| Direct Patient Care | 861 | NA | NA | 52.5% |

Central Utah Public Health District

| | Number | Flu | Pneumococcal | Hepatitis B |
|---------------------|--------|-------|--------------|-------------|
| Facilities | 15 | NA | NA | NA |
| Residents | 321 | 82.2% | 71.0% | NA |
| Employees All | 494 | 73.3% | NA | NA |
| Direct Patient Care | 348 | NA | NA | 68.1% |

Davis County Health District

| | Number | Flu | Pneumococcal | Hepatitis B |
|---------------------|--------|-------|--------------|-------------|
| Facilities | 24 | NA | NA | NA |
| Residents | 1,394 | 69.9% | 35.5% | NA |
| Employees All | 1,555 | 37.8% | NA | NA |
| Direct Patient Care | 940 | NA | NA | 29.3% |

Salt Lake Valley Health District

| | Number | Flu | Pneumococcal | Hepatitis B |
|---------------------|--------|-------|--------------|-------------|
| Facilities | 88 | NA | NA | NA |
| Residents | 6,074 | 70.5% | 36.4% | NA |
| Employees All | 5,228 | 43.9% | NA | NA |
| Direct Patient Care | 3,383 | NA | NA | 49.4% |

Southeastern Utah Public Health District

| | Number | Flu | Pneumococcal | Hepatitis B |
|---------------------|--------|-------|--------------|-------------|
| Facilities | 7 | NA | NA | NA |
| Residents | 293 | 81.6% | 49.5% | NA |
| Employees All | 339 | 56.3% | NA | NA |
| Direct Patient Care | 230 | NA | NA | 45.7% |

Southwest Utah Public Health District

| | Number | Flu | Pneumococcal | Hepatitis B |
|---------------------|--------|-------|--------------|-------------|
| Facilities | 20 | NA | NA | NA |
| Residents | 518 | 75.3% | 50.2% | NA |
| Employees All | 1,535 | 52.8% | NA | NA |
| Direct Patient Care | 985 | NA | NA | 52.0% |

Summit County Health District

| | Number | Flu | Pneumococcal | Hepatitis B |
|---------------------|--------|-------|--------------|-------------|
| Facilities | 1 | NA | NA | NA |
| Residents | 33 | 75.8% | 39.4% | NA |
| Employees All | 34 | 52.9% | NA | NA |
| Direct Patient Care | 22 | NA | NA | 40.9% |

Tooele County Health District

| | Number | Flu | Pneumococcal | Hepatitis B |
|---------------------|--------|-------|--------------|-------------|
| Facilities | 4 | NA | NA | NA |
| Residents | 133 | 92.5% | 57.1% | NA |
| Employees All | 485 | 63.3% | NA | NA |
| Direct Patient Care | 403 | NA | NA | 83.9% |

| TriCounty Health District | | | | |
|---------------------------|--------|-------|--------------|-------------|
| | Number | Flu | Pneumococcal | Hepatitis B |
| Facilities | 5 | NA | NA | NA |
| Residents | 242 | 78.5% | 56.2% | NA |
| Employees | | | | |
| All | 520 | 60.2% | NA | NA |
| Direct Patient Care | 354 | NA | NA | 64.7% |

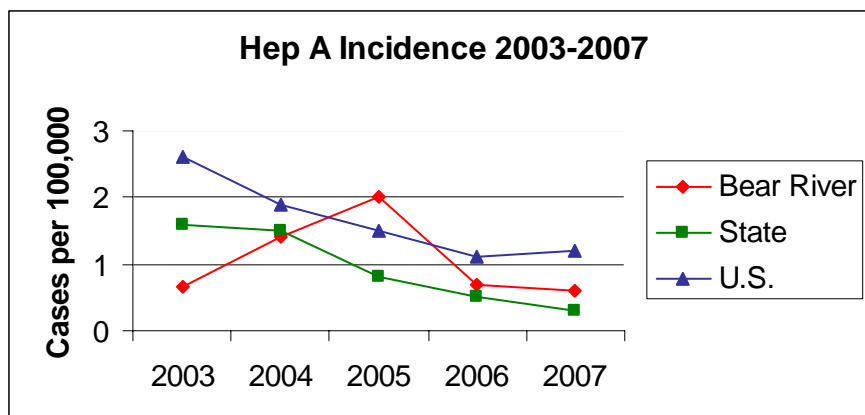
| Utah County Health District | | | | |
|-----------------------------|--------|-------|--------------|-------------|
| | Number | Flu | Pneumococcal | Hepatitis B |
| Facilities | 61 | NA | NA | NA |
| Residents | 2,638 | 75.1% | 55.0% | NA |
| Employees | | | | |
| All | 2,813 | 48.4% | NA | NA |
| Direct Patient Care | 2,154 | NA | NA | 47.9% |

| Wasatch County Health District | | | | |
|--------------------------------|--------|-------|--------------|-------------|
| | Number | Flu | Pneumococcal | Hepatitis B |
| Facilities | 1 | NA | NA | NA |
| Residents | 34 | 88.2% | 82.4% | NA |
| Employees | | | | |
| All | 45 | 68.9% | NA | NA |
| Direct Patient Care | 28 | NA | NA | 25.0% |

| Weber-Morgan Health District | | | | |
|------------------------------|--------|-------|--------------|-------------|
| | Number | Flu | Pneumococcal | Hepatitis B |
| Facilities | 22 | NA | NA | NA |
| Residents | 1,919 | 63.7% | 41.1% | NA |
| Employees | | | | |
| All | 1,508 | 46.4% | NA | NA |
| Direct Patient Care | 1,099 | NA | NA | 51.9% |

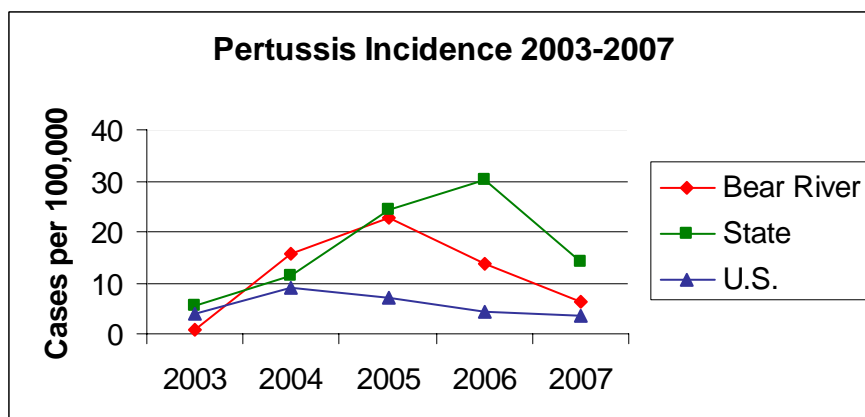
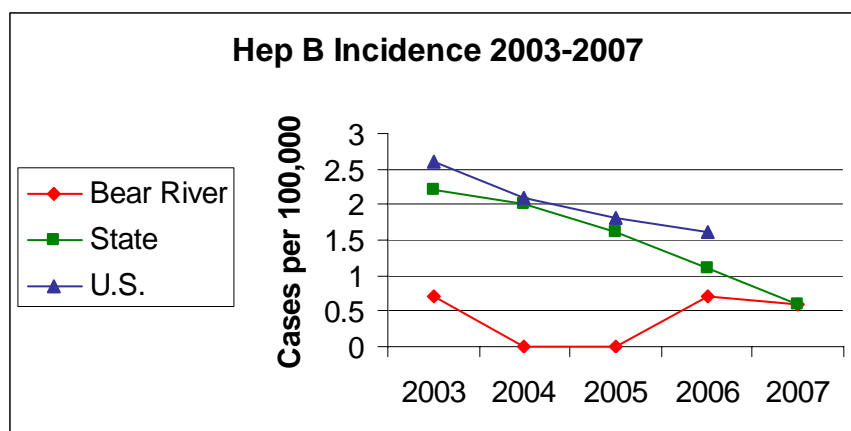
Appendix C Incidence of Disease

Hepatitis A, Hepatitis B and Pertussis are diseases that are preventable through immunization. Trends in vaccine preventable diseases are tracked with the intent that the data can be helpful in developing collaborative immunization campaign efforts. The following data were provided by the Office of Epidemiology, Utah Department of Health, for statewide and local health districts.

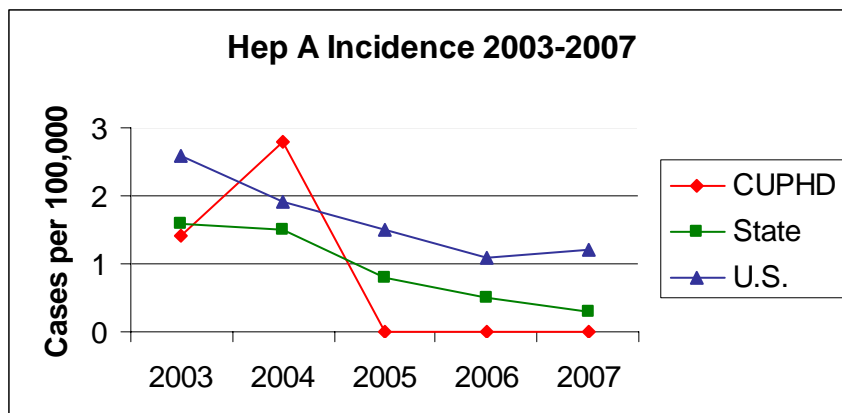


| Hepatitis A | | | |
|-------------|-----|-------|-----|
| Year | US | State | BR |
| 2003 | 2.6 | 1.6 | 0.7 |
| 2004 | 1.9 | 1.5 | 1.4 |
| 2005 | 1.5 | 0.8 | 2.0 |
| 2006 | 1.1 | 0.5 | 0.7 |
| 2007 | 1.2 | 0.3 | 0.6 |

| Hepatitis B | | | |
|-------------|-----|-------|-----|
| Year | US | State | BR |
| 2003 | 2.6 | 2.2 | 0.7 |
| 2004 | 2.1 | 2.0 | 0.0 |
| 2005 | 1.8 | 1.6 | 0.0 |
| 2006 | 1.6 | 1.1 | 0.7 |
| 2007 | NA | 0.6 | 0.6 |

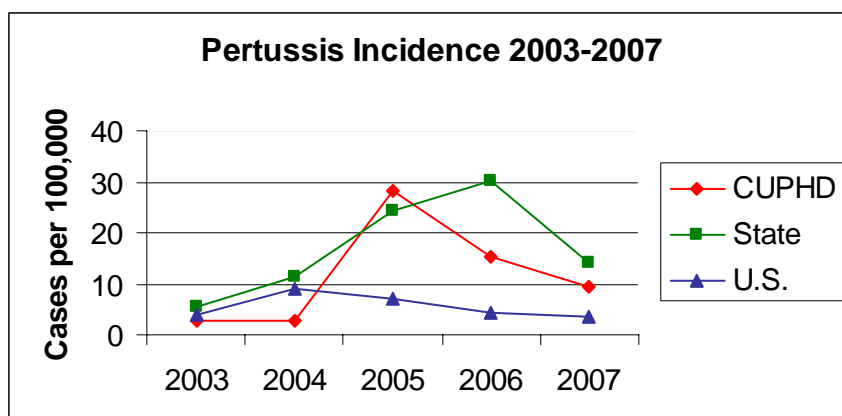
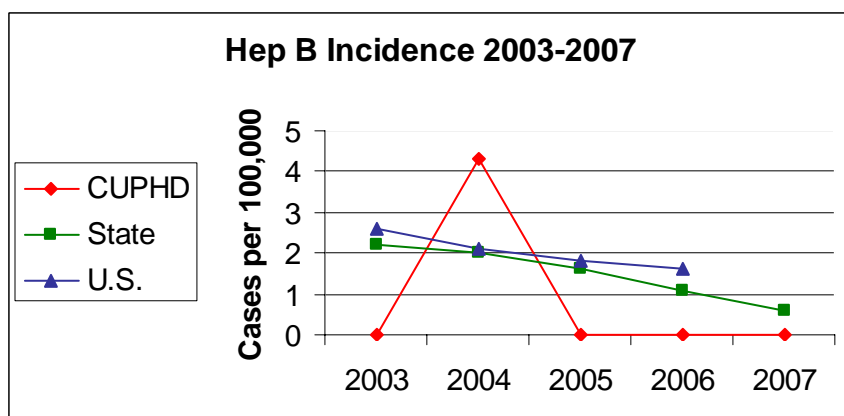


| Pertussis | | | |
|-----------|-----|-------|------|
| Year | US | State | BR |
| 2003 | 4.0 | 5.3 | 0.7 |
| 2004 | 8.9 | 11.2 | 15.7 |
| 2005 | 7.1 | 24.4 | 22.7 |
| 2006 | 4.3 | 30.1 | 13.8 |
| 2007 | 3.5 | 14.3 | 6.3 |

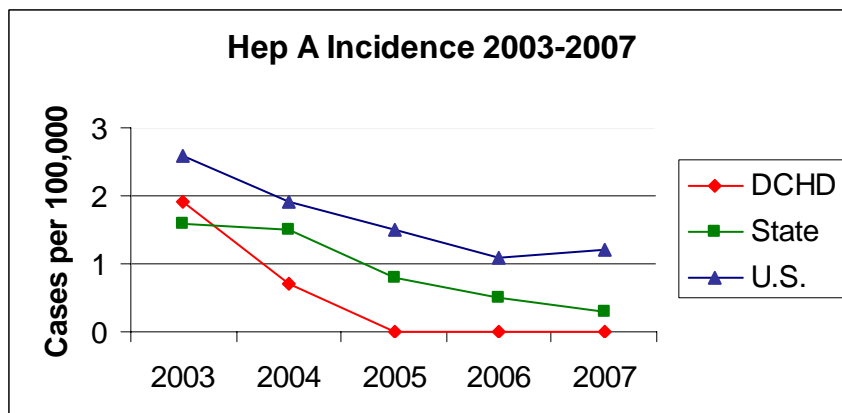


| Hepatitis A | | | |
|-------------|-----|-------|---------|
| Year | US | State | Central |
| 2003 | 2.6 | 1.6 | 1.4 |
| 2004 | 1.9 | 1.5 | 2.8 |
| 2005 | 1.5 | 0.8 | 0.0 |
| 2006 | 1.1 | 0.5 | 0.0 |
| 2007 | 1.2 | 0.3 | 0.0 |

| Hepatitis B | | | |
|-------------|-----|-------|---------|
| Year | US | State | Central |
| 2003 | 2.6 | 2.2 | 0.0 |
| 2004 | 2.1 | 2.0 | 4.3 |
| 2005 | 1.8 | 1.6 | 0.0 |
| 2006 | 1.6 | 1.1 | 0.0 |
| 2007 | NA | 0.6 | 0.0 |

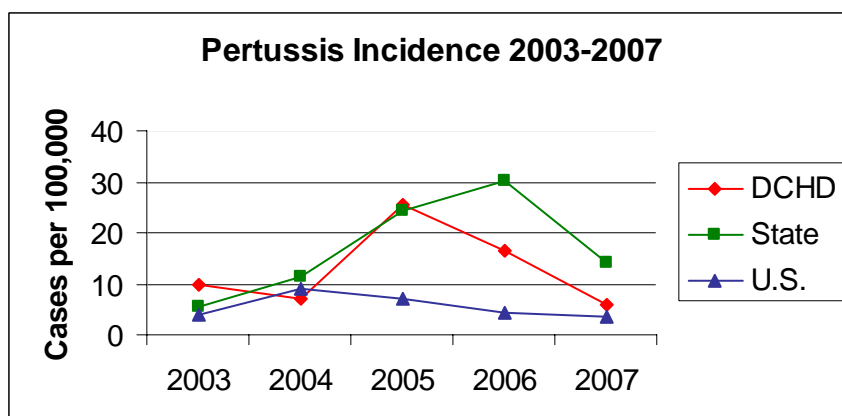
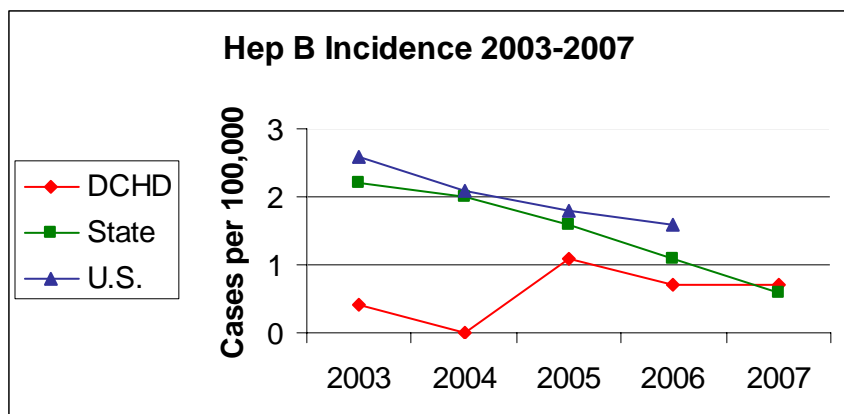


| Pertussis | | | |
|-----------|-----|-------|---------|
| Year | US | State | Central |
| 2003 | 4.0 | 5.3 | 2.9 |
| 2004 | 8.9 | 11.2 | 2.8 |
| 2005 | 7.1 | 24.4 | 28.2 |
| 2006 | 4.3 | 30.1 | 15.4 |
| 2007 | 3.5 | 14.3 | 9.5 |

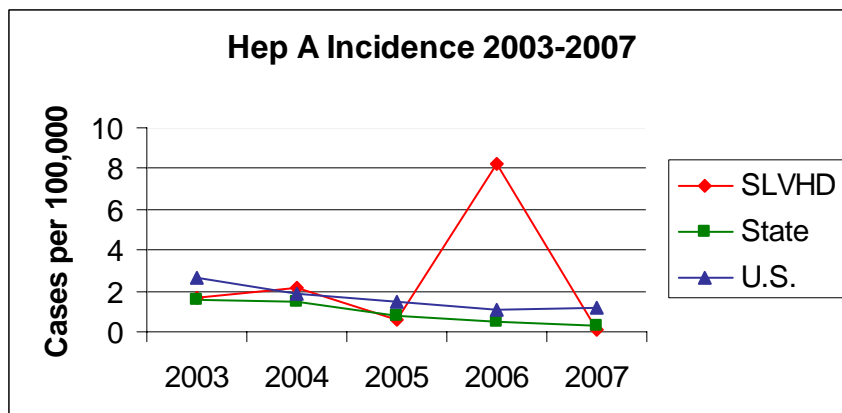


| Hepatitis A | | | |
|-------------|-----|-------|-------|
| Year | US | State | Davis |
| 2003 | 2.6 | 1.6 | 1.9 |
| 2004 | 1.9 | 1.5 | 0.7 |
| 2005 | 1.5 | 0.8 | 0.0 |
| 2006 | 1.1 | 0.5 | 0.0 |
| 2007 | 1.2 | 0.3 | 0.0 |

| Hepatitis B | | | |
|-------------|-----|-------|-------|
| Year | US | State | Davis |
| 2003 | 2.6 | 2.2 | 0.4 |
| 2004 | 2.1 | 2.0 | 0.0 |
| 2005 | 1.8 | 1.6 | 1.1 |
| 2006 | 1.6 | 1.1 | 0.7 |
| 2007 | NA | 0.6 | 0.7 |

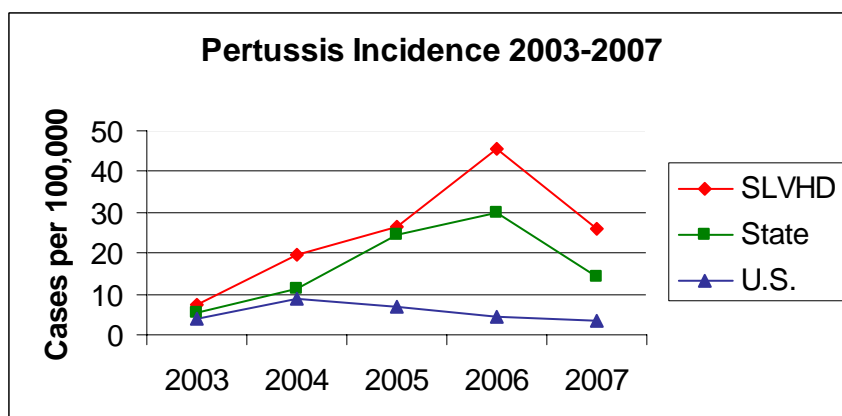
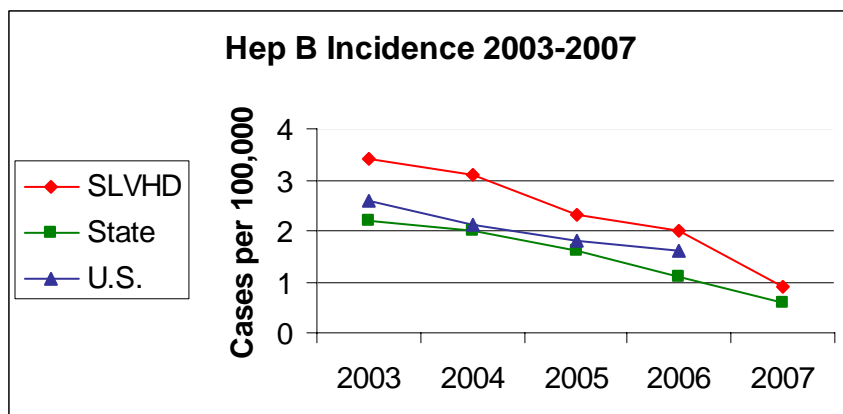


| Pertussis | | | |
|-----------|-----|-------|-------|
| Year | US | State | Davis |
| 2003 | 4.0 | 5.3 | 9.9 |
| 2004 | 8.9 | 11.2 | 7.1 |
| 2005 | 7.1 | 24.4 | 25.3 |
| 2006 | 4.3 | 30.1 | 16.3 |
| 2007 | 3.5 | 14.3 | 5.7 |

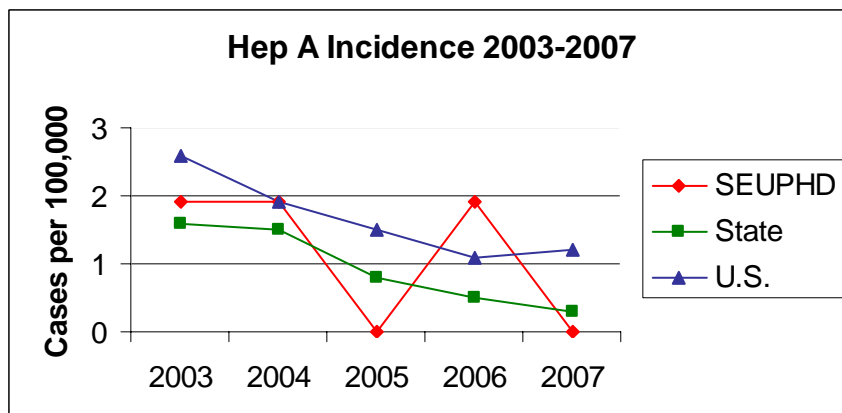


| Hepatitis A | | | |
|-------------|-----|-------|-----|
| Year | US | State | SLV |
| 2003 | 2.6 | 1.6 | 1.7 |
| 2004 | 1.9 | 1.5 | 2.2 |
| 2005 | 1.5 | 0.8 | 0.6 |
| 2006 | 1.1 | 0.5 | 8.2 |
| 2007 | 1.2 | 0.3 | 0.1 |

| Hepatitis B | | | |
|-------------|-----|-------|-----|
| Year | US | State | SLV |
| 2003 | 2.6 | 2.2 | 3.4 |
| 2004 | 2.1 | 2.0 | 3.1 |
| 2005 | 1.8 | 1.6 | 2.3 |
| 2006 | 1.6 | 1.1 | 2.0 |
| 2007 | NA | 0.6 | 0.9 |

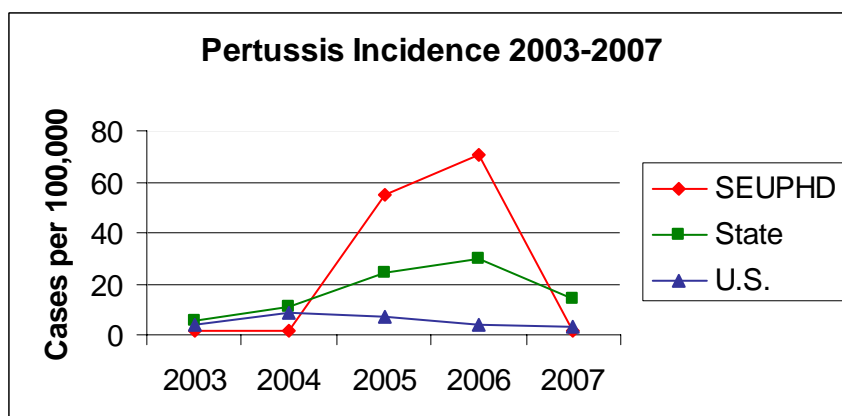
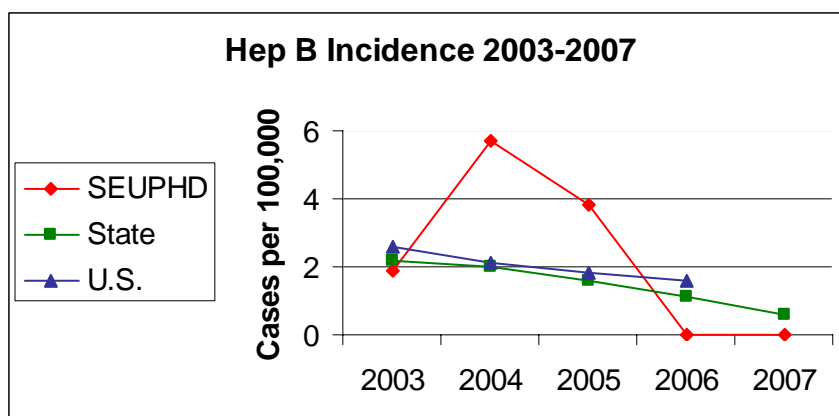


| Pertussis | | | |
|-----------|-----|-------|------|
| Year | US | State | SLV |
| 2003 | 4.0 | 5.3 | 7.4 |
| 2004 | 8.9 | 11.2 | 19.7 |
| 2005 | 7.1 | 24.4 | 26.7 |
| 2006 | 4.3 | 30.1 | 45.6 |
| 2007 | 3.5 | 14.3 | 26.0 |

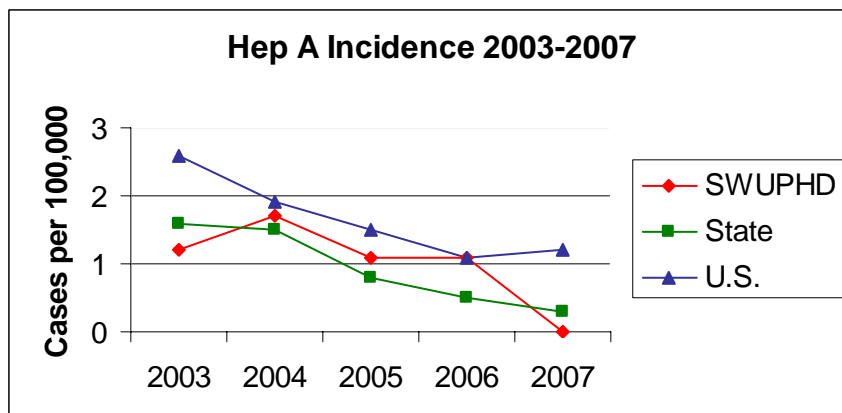


| Hepatitis A | | | |
|-------------|-----|-------|-----|
| Year | US | State | SE |
| 2003 | 2.6 | 1.6 | 1.9 |
| 2004 | 1.9 | 1.5 | 1.9 |
| 2005 | 1.5 | 0.8 | 0.0 |
| 2006 | 1.1 | 0.5 | 1.9 |
| 2007 | 1.2 | 0.3 | 0.0 |

| Hepatitis B | | | |
|-------------|-----|-------|-----|
| Year | US | State | SE |
| 2003 | 2.6 | 2.2 | 1.9 |
| 2004 | 2.1 | 2.0 | 5.7 |
| 2005 | 1.8 | 1.6 | 3.8 |
| 2006 | 1.6 | 1.1 | 0.0 |
| 2007 | NA | 0.6 | 0.0 |

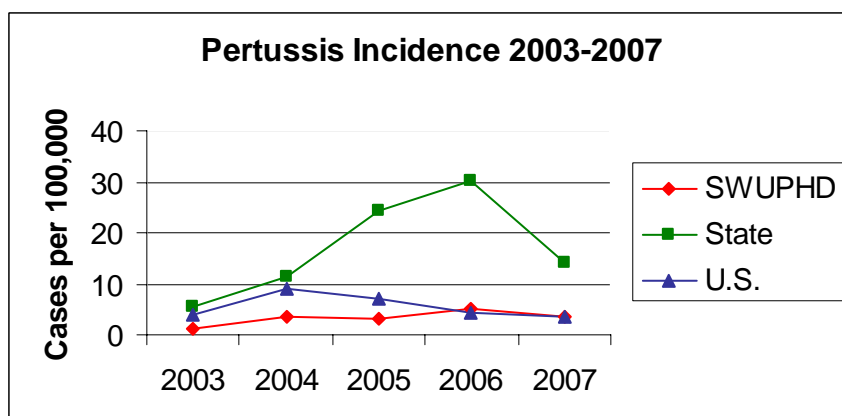
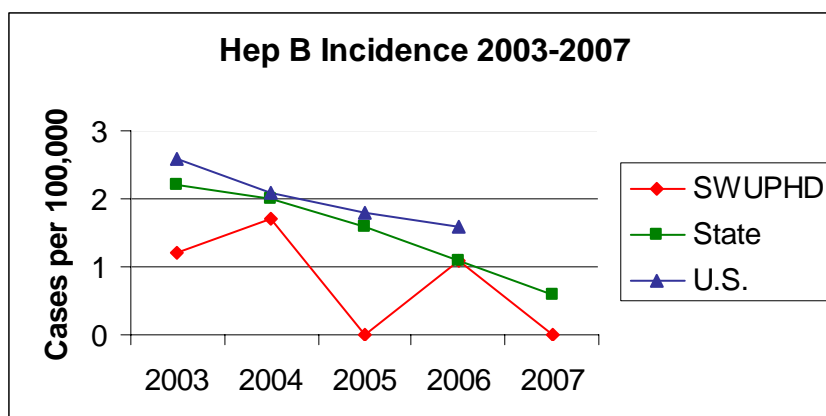


| Pertussis | | | |
|-----------|-----|-------|------|
| Year | US | State | SE |
| 2003 | 4.0 | 5.3 | 1.9 |
| 2004 | 8.9 | 11.2 | 1.9 |
| 2005 | 7.1 | 24.4 | 54.9 |
| 2006 | 4.3 | 30.1 | 70.5 |
| 2007 | 3.5 | 14.3 | 1.9 |

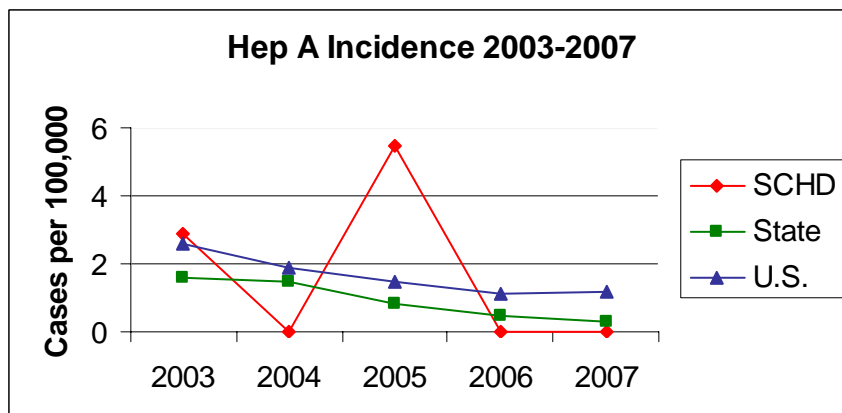


| Hepatitis A | | | |
|-------------|-----|-------|-----|
| Year | US | State | SW |
| 2003 | 2.6 | 1.6 | 1.2 |
| 2004 | 1.9 | 1.5 | 1.7 |
| 2005 | 1.5 | 0.8 | 1.1 |
| 2006 | 1.1 | 0.5 | 1.1 |
| 2007 | 1.2 | 0.3 | 0.0 |

| Hepatitis B | | | |
|-------------|-----|-------|-----|
| Year | US | State | SW |
| 2003 | 2.6 | 2.2 | 1.2 |
| 2004 | 2.1 | 2.0 | 1.7 |
| 2005 | 1.8 | 1.6 | 0.0 |
| 2006 | 1.6 | 1.1 | 1.1 |
| 2007 | NA | 0.6 | 0.0 |

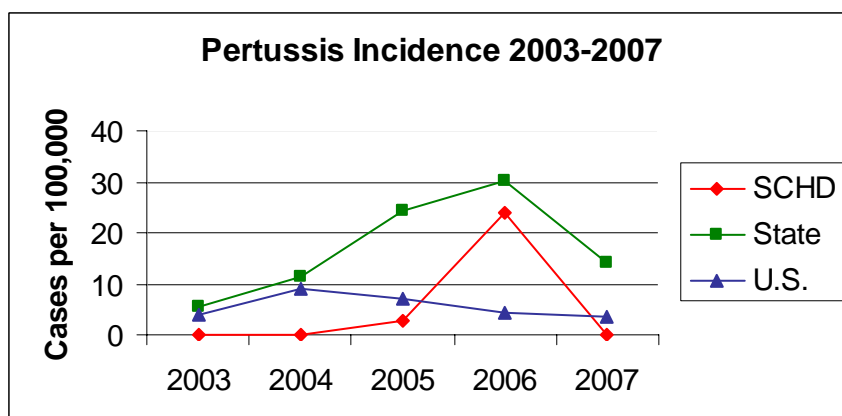
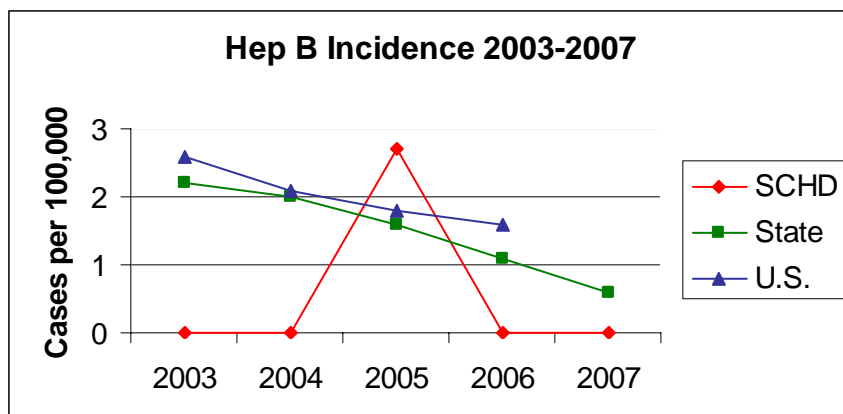


| Pertussis | | | |
|-----------|-----|-------|-----|
| Year | US | State | SW |
| 2003 | 4.0 | 5.3 | 1.2 |
| 2004 | 8.9 | 11.2 | 3.5 |
| 2005 | 7.1 | 24.4 | 3.3 |
| 2006 | 4.3 | 30.1 | 5.2 |
| 2007 | 3.5 | 14.3 | 3.4 |

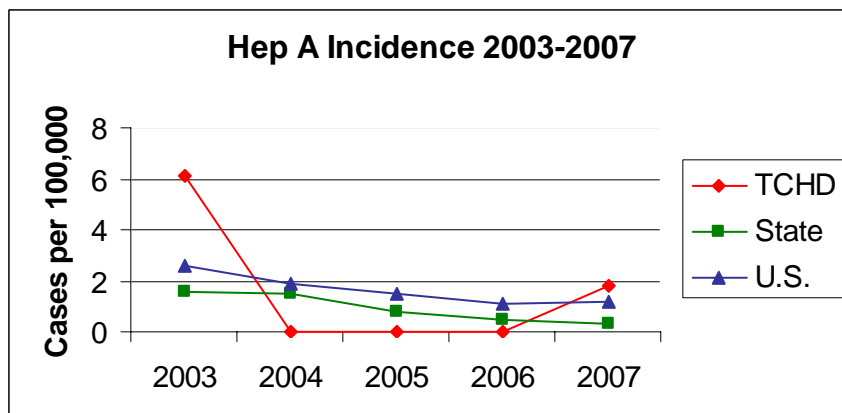


| Hepatitis A | | | |
|-------------|-----|-------|-----|
| Year | US | State | Sum |
| 2003 | 2.6 | 1.6 | 2.9 |
| 2004 | 1.9 | 1.5 | 0.0 |
| 2005 | 1.5 | 0.8 | 5.5 |
| 2006 | 1.1 | 0.5 | 0.0 |
| 2007 | 1.2 | 0.3 | 0.0 |

| Hepatitis B | | | |
|-------------|-----|-------|-----|
| Year | US | State | Sum |
| 2003 | 2.6 | 2.2 | 0.0 |
| 2004 | 2.1 | 2.0 | 0.0 |
| 2005 | 1.8 | 1.6 | 2.7 |
| 2006 | 1.6 | 1.1 | 0.0 |
| 2007 | NA | 0.6 | 0.0 |

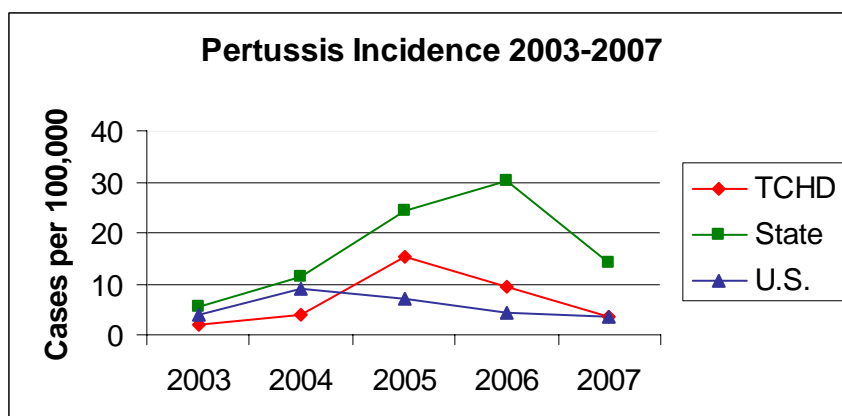
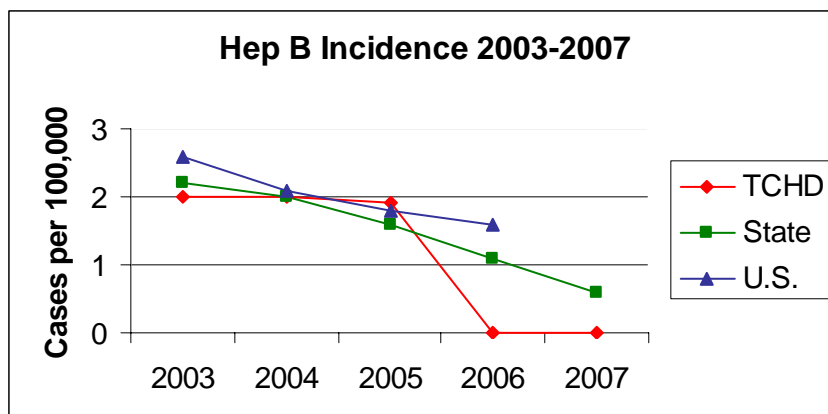


| Pertussis | | | |
|-----------|-----|-------|------|
| Year | US | State | Sum |
| 2003 | 4.0 | 5.3 | 0.0 |
| 2004 | 8.9 | 11.2 | 0.0 |
| 2005 | 7.1 | 24.4 | 2.7 |
| 2006 | 4.3 | 30.1 | 23.9 |
| 2007 | 3.5 | 14.3 | 0.0 |

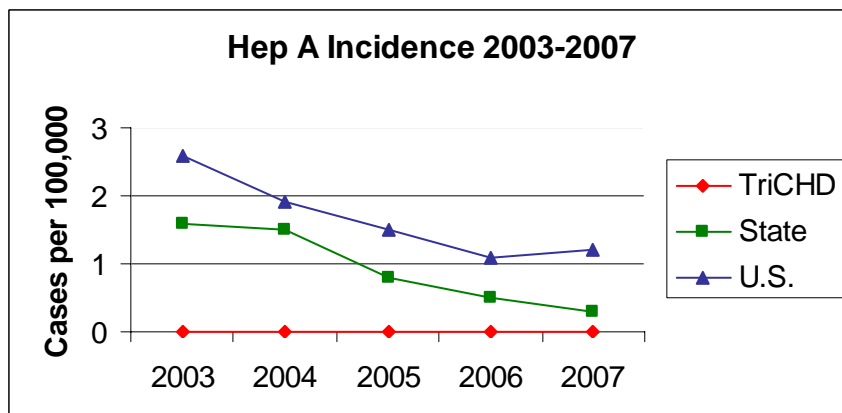


| Hepatitis A | | | |
|-------------|-----|-------|--------|
| Year | US | State | Tooele |
| 2003 | 2.6 | 1.6 | 6.1 |
| 2004 | 1.9 | 1.5 | 0.0 |
| 2005 | 1.5 | 0.8 | 0.0 |
| 2006 | 1.1 | 0.5 | 0.0 |
| 2007 | 1.2 | 0.3 | 1.8 |

| Hepatitis B | | | |
|-------------|-----|-------|--------|
| Year | US | State | Tooele |
| 2003 | 2.6 | 2.2 | 2.0 |
| 2004 | 2.1 | 2.0 | 2.0 |
| 2005 | 1.8 | 1.6 | 1.9 |
| 2006 | 1.6 | 1.1 | 0.0 |
| 2007 | NA | 0.6 | 0.0 |

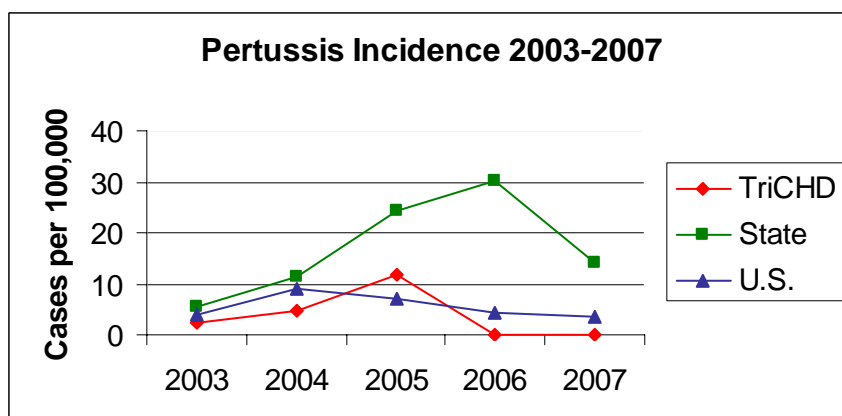
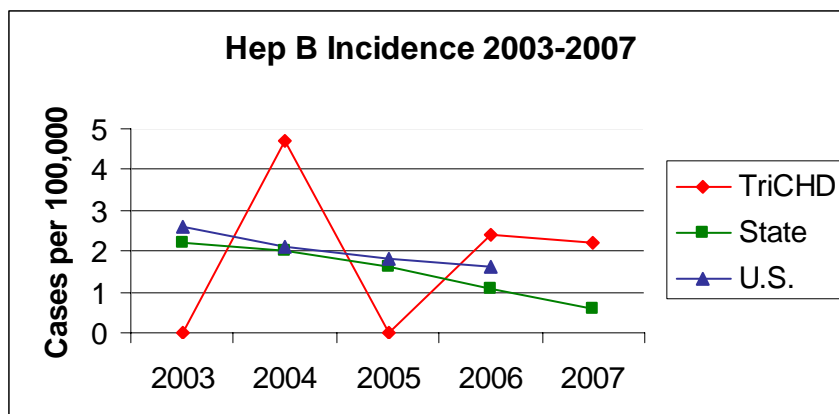


| Pertussis | | | |
|-----------|-----|-------|--------|
| Year | US | State | Tooele |
| 2003 | 4.0 | 5.3 | 2.0 |
| 2004 | 8.9 | 11.2 | 4.0 |
| 2005 | 7.1 | 24.4 | 15.4 |
| 2006 | 4.3 | 30.1 | 9.4 |
| 2007 | 3.5 | 14.3 | 3.5 |

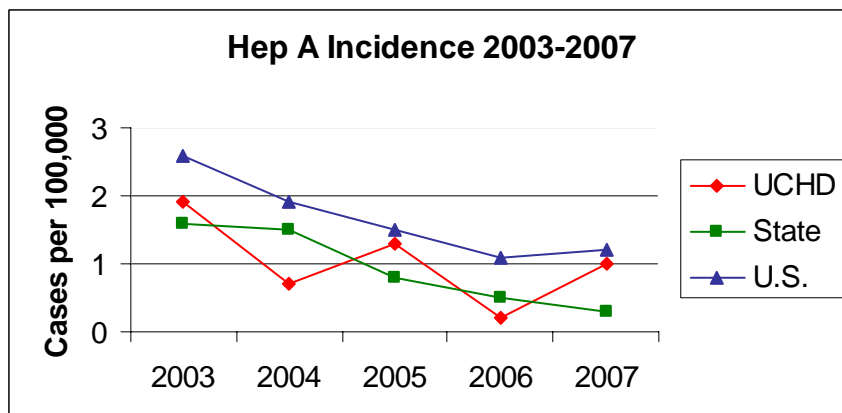


| Hepatitis A | | | |
|-------------|-----|-------|-------|
| Year | US | State | TriCo |
| 2003 | 2.6 | 1.6 | 0.0 |
| 2004 | 1.9 | 1.5 | 0.0 |
| 2005 | 1.5 | 0.8 | 0.0 |
| 2006 | 1.1 | 0.5 | 0.0 |
| 2007 | 1.2 | 0.3 | 0.0 |

| Hepatitis B | | | |
|-------------|-----|-------|-------|
| Year | US | State | TriCo |
| 2003 | 2.6 | 2.2 | 0.0 |
| 2004 | 2.1 | 2.0 | 4.7 |
| 2005 | 1.8 | 1.6 | 0.0 |
| 2006 | 1.6 | 1.1 | 2.4 |
| 2007 | NA | 0.6 | 2.2 |

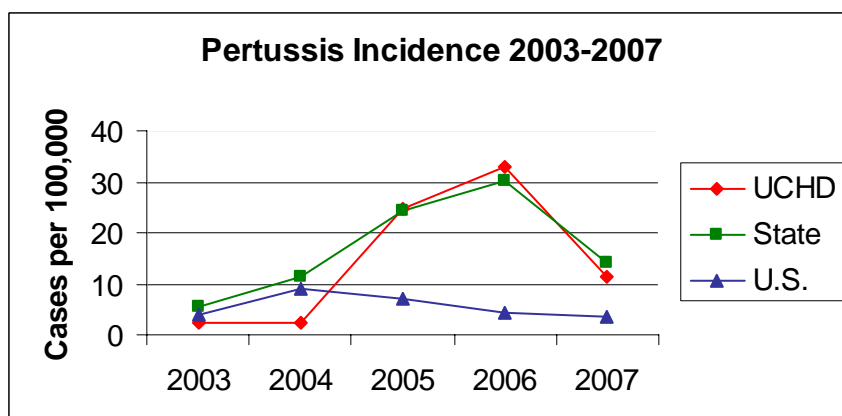
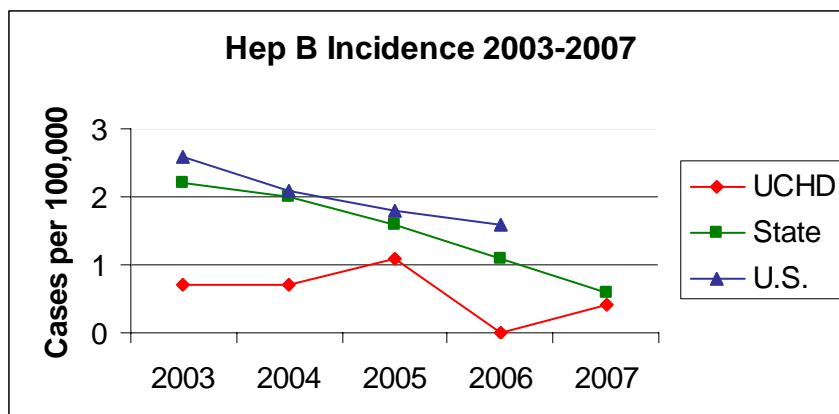


| Pertussis | | | |
|-----------|-----|-------|-------|
| Year | US | State | TriCo |
| 2003 | 4.0 | 5.3 | 2.4 |
| 2004 | 8.9 | 11.2 | 4.7 |
| 2005 | 7.1 | 24.4 | 18.8 |
| 2006 | 4.3 | 30.1 | 0.0 |
| 2007 | 3.5 | 14.3 | 0.0 |

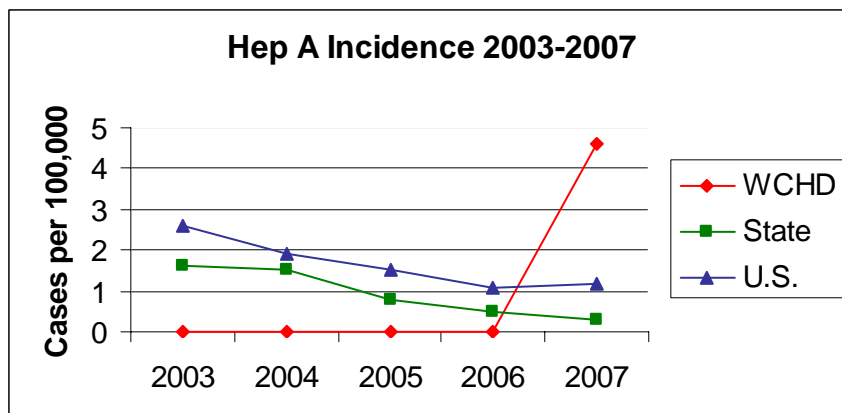


| Hepatitis A | | | |
|-------------|-----|-------|--------|
| Year | US | State | UtahCo |
| 2003 | 2.6 | 1.6 | 1.9 |
| 2004 | 1.9 | 1.5 | 0.7 |
| 2005 | 1.5 | 0.8 | 1.3 |
| 2006 | 1.1 | 0.5 | 0.2 |
| 2007 | 1.2 | 0.3 | 1.0 |

| Hepatitis B | | | |
|-------------|-----|-------|--------|
| Year | US | State | UtahCo |
| 2003 | 2.6 | 2.2 | 0.7 |
| 2004 | 2.1 | 2.0 | 0.7 |
| 2005 | 1.8 | 1.6 | 1.1 |
| 2006 | 1.6 | 1.1 | 0.0 |
| 2007 | NA | 0.6 | 0.4 |

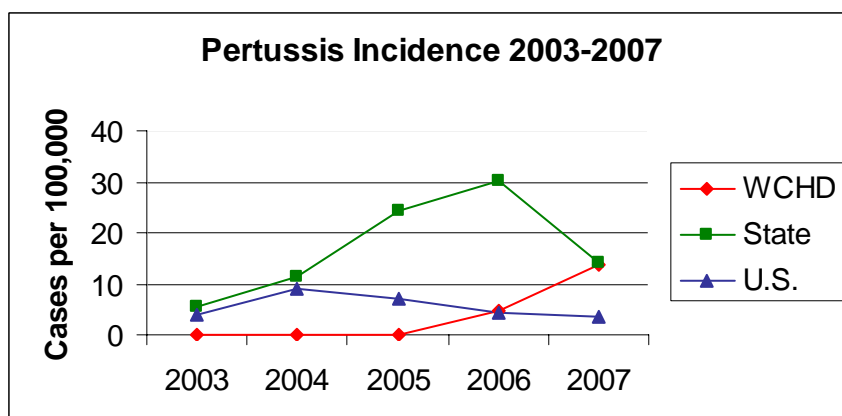
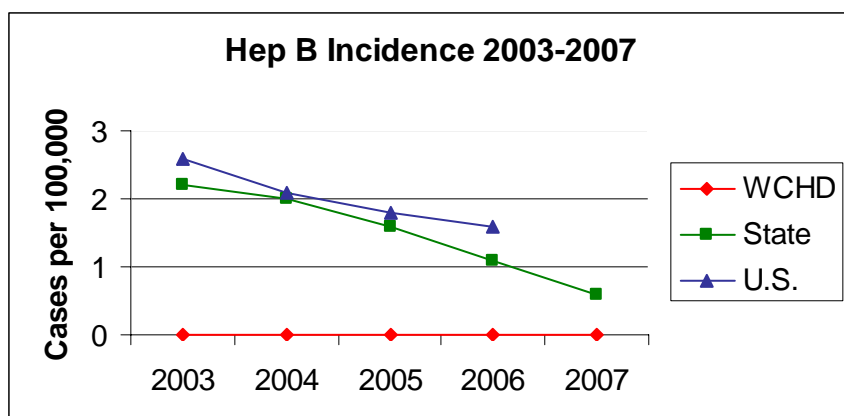


| Pertussis | | | |
|-----------|-----|-------|--------|
| Year | US | State | UtahCo |
| 2003 | 4.0 | 5.3 | 2.4 |
| 2004 | 8.9 | 11.2 | 2.5 |
| 2005 | 7.1 | 24.4 | 24.9 |
| 2006 | 7.1 | 30.1 | 33.0 |
| 2007 | 3.5 | 14.3 | 11.4 |

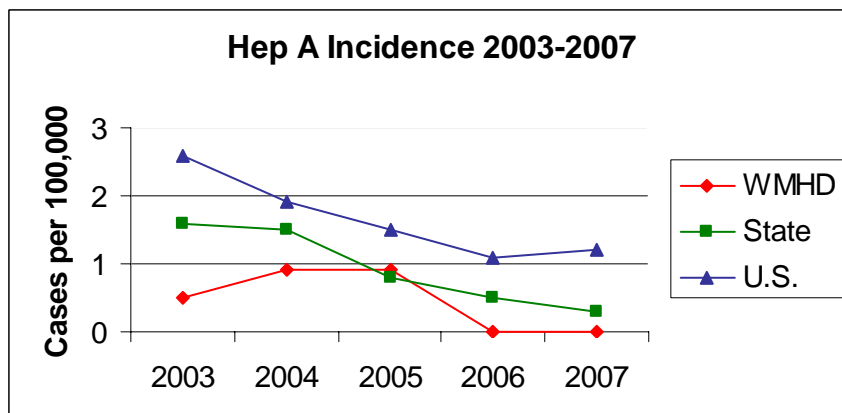


| Hepatitis A | | | |
|-------------|-----|-------|-----|
| Year | US | State | Was |
| 2003 | 2.6 | 1.6 | 0.0 |
| 2004 | 1.9 | 1.5 | 0.0 |
| 2005 | 1.5 | 0.8 | 0.0 |
| 2006 | 1.1 | 0.5 | 0.0 |
| 2007 | 1.2 | 0.3 | 4.6 |

| Hepatitis B | | | |
|-------------|-----|-------|-----|
| Year | US | State | Was |
| 2003 | 2.6 | 2.2 | 0.0 |
| 2004 | 2.1 | 2.0 | 0.0 |
| 2005 | 1.8 | 1.6 | 0.0 |
| 2006 | 1.6 | 1.1 | 0.0 |
| 2007 | NA | 0.6 | 0.0 |

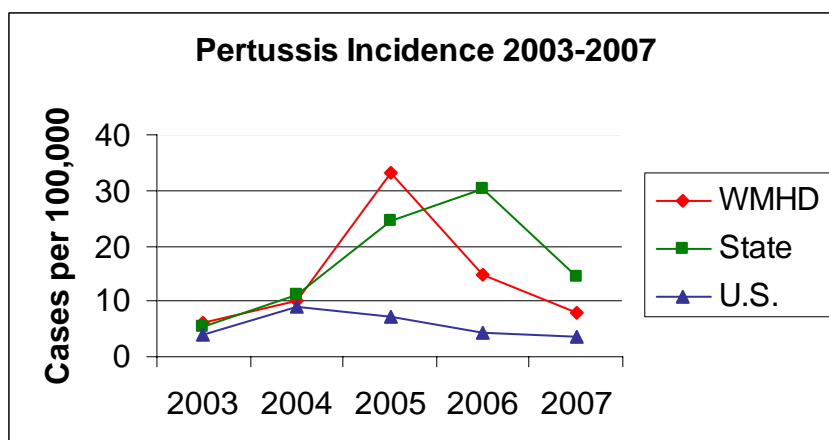
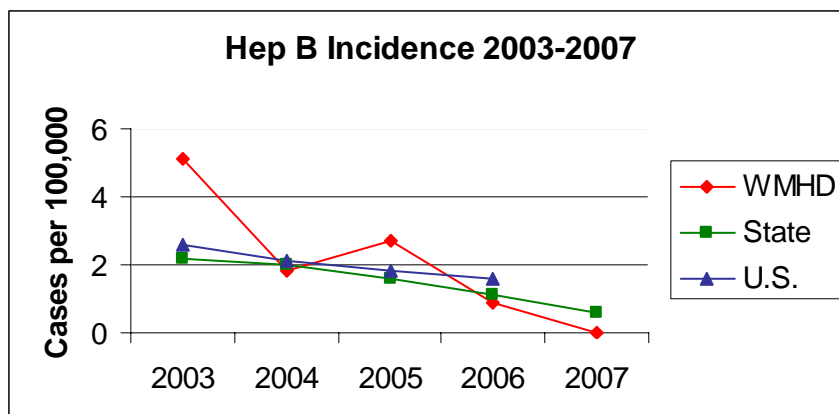


| Pertussis | | | |
|-----------|-----|-------|------|
| Year | US | State | Was |
| 2003 | 4.0 | 5.3 | 0.0 |
| 2004 | 8.9 | 11.2 | 0.0 |
| 2005 | 7.1 | 24.4 | 0.0 |
| 2006 | 4.3 | 30.1 | 4.8 |
| 2007 | 3.5 | 14.3 | 13.7 |



| Hepatitis A | | | |
|-------------|-----|-------|-----|
| Year | US | State | W-M |
| 2003 | 2.6 | 1.6 | 0.5 |
| 2004 | 1.9 | 1.5 | 0.9 |
| 2005 | 1.5 | 0.8 | 0.9 |
| 2006 | 1.1 | 0.5 | 0.0 |
| 2007 | 1.2 | 0.3 | 0.0 |

| Hepatitis B | | | |
|-------------|-----|-------|-----|
| Year | US | State | W-M |
| 2003 | 2.6 | 2.2 | 5.1 |
| 2004 | 2.1 | 2.0 | 1.8 |
| 2005 | 1.8 | 1.6 | 2.7 |
| 2006 | 1.6 | 1.1 | 0.9 |
| 2007 | NA | 0.6 | 0.0 |

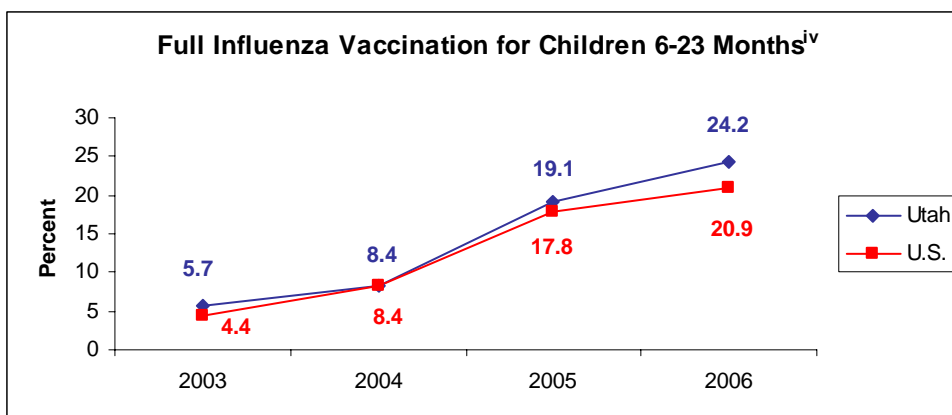
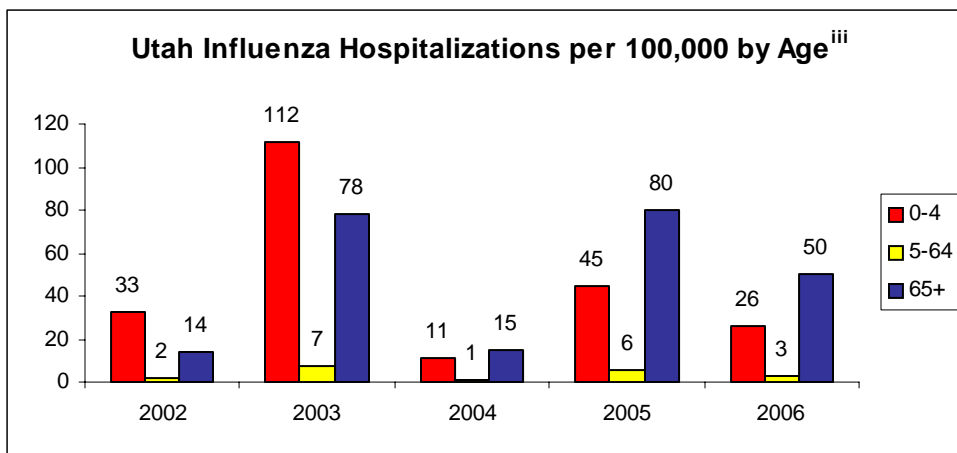


| Pertussis | | | |
|-----------|-----|-------|------|
| Year | US | State | W-M |
| 2003 | 4.0 | 5.3 | 6.1 |
| 2004 | 8.9 | 11.2 | 10.1 |
| 2005 | 7.1 | 24.4 | 33.0 |
| 2006 | 4.3 | 30.1 | 14.8 |
| 2007 | 3.5 | 14.3 | 7.8 |

Influenza (flu) is a very contagious viral infection of the nose, throat, bronchial tubes, and lungs. Flu is a respiratory infection and generally does not involve gastrointestinal symptoms, except in very young children. It is estimated that 30 to 60 million U.S. residents get the flu each year. About 100,000 of them are hospitalized and an estimated 36,000 die each year from complications (primarily pneumonia) associated with the infection. Populations that are particularly susceptible to influenza include adults 65 years or older (more than 90% of all influenza deaths), children less than 24 months, people with cardiovascular disease, chronic respiratory disease, and people with chronic metabolic disease such as diabetes.ⁱ Each year in the U.S. there are between 100 and 500 hospitalizations per 100,000 children 0-4 years.ⁱⁱ Utah data can be seen in the first chart below.

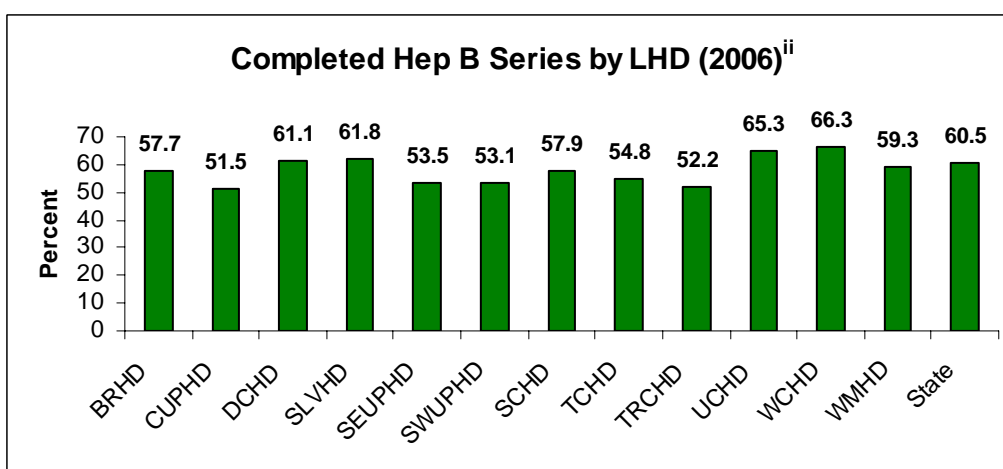
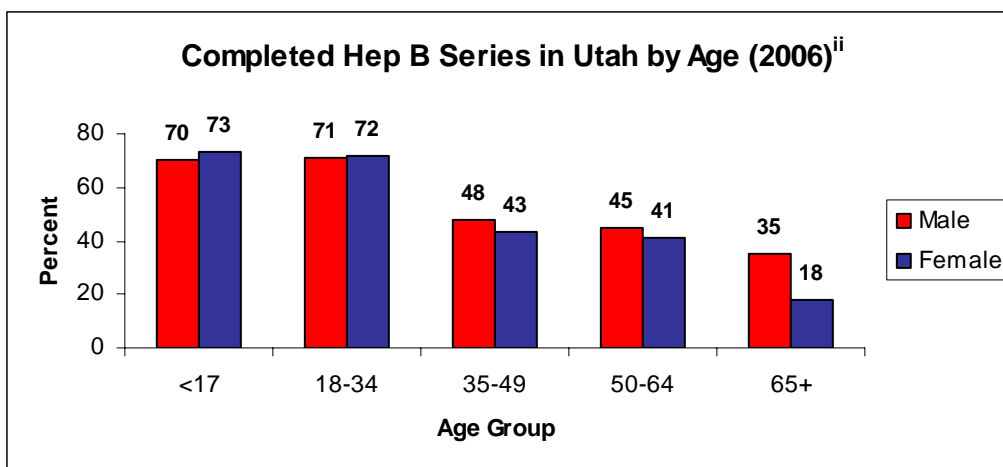
Flu vaccine is up to 90% effective in preventing illness for healthy populations younger than 65ⁱⁱⁱ, but effectiveness is contingent upon the strains used in the vaccine being similar to the strains that circulate during flu season. For populations older than 65 years, the vaccine is 30-40% effective in preventing illness, 50-60% in preventing hospitalization, and 80% effective in preventing death. As indicated below, Utah compares favorably with national flu vaccination rates for children 6-23 months, but there is still much room for improvement. Charts for flu vaccination among adults 18 years and older can be found on the *Child and Adult Immunization* pages in the main body of this report.

The 2006 National Health Interview Survey (NHIS) collected flu vaccination data among people with asthma during the 2005-2006 flu season. This survey indicated that 36.2% of participants 2 years and older with asthma received a flu vaccine, while 23.9% of participants without asthma were vaccinated. The NHIS found that, among all age groups, persons with asthma were more likely to be vaccinated than persons without asthma. Flu vaccination was higher among persons with health insurance and among persons with increasing numbers of annual healthcare visits.^v



Sources: ⁱ <http://ibis.health.utah.gov/indicator/view/InflCas.Year.html>, ⁱⁱ Epidemiology and Prevention of Vaccine-Preventable Diseases (CDC Pink Book), ⁱⁱⁱ IBIS-PH Hospitalization data, ^{iv} NIS 2003-2006, ^v CDC, Influenza Vaccination Coverage Among Persons with Asthma—United States, 2005-2006 Influenza Season. MMWR 2008;57(No. 224).

Hepatitis B is second only to tobacco among known human carcinogens and is the cause of up to 80% of liver cancers. In the U.S. there are between 1 and 1.25 million persons infected with chronic Hepatitis B and 5,000 to 8,000 become chronically infected each year. Persons with chronic infections may be asymptomatic, but can still infect others. Transmission occurs by parenteral or mucosal exposure to body fluids from someone with acute or chronic infection. In the U.S., the most common mode of transmission is through sexual contact. Adult candidates for vaccination include men who have sex with men, heterosexuals who have multiple partners, persons diagnosed with a sexually transmitted disease (STD), prostitutes, injection drug users, inmates of long-term correctional institutions, persons receiving hemodialysis, and health care workers. Ninety to 95% of teens and adults and 98%-100% of infants receiving a completed series (3 doses) will develop sufficient antibodies for protection against infection.ⁱ The number of Utah adults who have completed the vaccine series is slightly above 60%. The percentage drops as age increases, which is expected since the vaccine wasn't available until 1981. There is little variation in coverage levels across local health districts.



Sources:

ⁱ Epidemiology and Prevention of Vaccine-Preventable Diseases (CDC Pink Book),

ⁱⁱ 2006 Utah Health Status Survey

UPIQ Immunization Project

Fourteen medical practices from Utah, Davis, and Weber counties were recruited to participate in the Utah Pediatric Partnership to Improve Healthcare Quality (UPIQ) Immunization Project. A modified Comprehensive Clinic Assessment Software Application (CoCASA) audit was completed at each practice from September through November of 2007. Practices with immunization rates above 75% up-to-date for the 4:3:1:3:3:1 series were excluded from participation. The remaining 10 practices were randomized into Intervention and Control groups.

Initial in-office sessions were held at all intervention practices in March 2008. The sessions lasted for approximately one hour during breakfast or lunch. All providers and staff were invited to attend (attendance records for each visit available upon request). A UPIQ-trained community peer mentor physician and/or staff presented a brief (20-minute) educational module on challenges to providing immunization services and opportunities to improve office systems related to immunization services. The UPIQ Program Manager presented the results from the practices' CoCASA audit and facilitated the group discussion and action planning portions of the meeting. All staff members were encouraged to identify areas of their office systems where improvements could be made. The UPIQ Program Manager guided practices in developing an initial improvement plan and in identifying the next steps required for implementation. In addition, UDOH staff and peer mentors were on hand to answer questions and provide suggestions as practices discussed the strengths and weaknesses of their current systems.

Upon conclusion of the initial session, UPIQ provided practices with a summary of the discussion and the practices' improvement plan. Follow-up support and additional in-office sessions have been offered and provided based on each practice's needs and desires. Approximately 15 months after the start of the intervention, CoCASA audits will be repeated.

Women, Infants, & Children (WIC) One-Month Voucher Programs

Under the Tooele County Health Department one-month voucher (OMV) Program, a WIC participant who lacked an up-to-date immunization record was issued a food/formula voucher for a one-month time frame rather than the typical three-month period. One-month vouchers were issued until the client presented an UTD immunization record. The client had the option of receiving an immunization at the time of the visit, whereupon they received three months of vouchers the same day. Clients who were not UTD were sent priority messages through the WIC information system. Tooele WIC also extended business hours to accommodate clients who required immunizations. Due to lack of funding, data collection during 2007 was eliminated.

The Salt Lake Valley Health Department (SLVHD) implemented the *WIC/Imms Initiative* in 2007 with additional funding provided by Intermountain Healthcare and the Salt Lake County Council. The original project provided immunization vouchers to primary care physicians to offer to parents of children who did not have another payer method (e.g., insurance, VFC), hoping to keep children with their medical home. However, they had poor utilization of the free vaccine vouchers. This project also focused on children two years old and younger who were receiving WIC services. Children who are current on recommended vaccines are eligible to receive three months of WIC vouchers. Children who are behind on recommended vaccines have the option of receiving vaccines at the SLVHD immunization clinic (co-located with the WIC clinic) or receive one-month vouchers until the child is brought current on vaccines. The SLVHD is tracking approximately 1,100 children who are two and younger. For children who only receive their immunizations at the SLVHD, the coverage rate is 83%. For children who receive immunizations from additional providers, the coverage rate is 73%.

These Utah OMV programs were modeled after successful programs in other states and municipalities. Analysis of the Chicago OMV program indicated that UTD vaccination status for two-year-old children increased from 56% to 89%. Over the 15-month period of analysis, the percentage of children needing voucher incentives decreased from 51% to 12%.ⁱ The New Mexico Region 4 WIC program manager reports that, over a 10-year period, immunization rates for their clients increased from 35% to 91% following their OMV Program.

ⁱ Hoekstra EJ, et al. Impact of a large scale immunization initiative in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). *JAMA*, 280(13), 1143-7.

The Utah Immunization Rule for Students (R396-100) requires students entering kindergarten to have received the following immunizations: 5 DTaP, 4 Polio, 2 MMR, 3 Hepatitis B, 2 Hepatitis A, 1 Varicella. Every school in Utah that enrolls kindergarten students reports the number of students who meet the requirement through an online system each year. The CDC asked the Utah Immunization Program (UIP) to validate the results of the annual electronic report. The April 30, 2008 electronic report indicated that 83.9% of students entering kindergarten met school requirements, 2.9% of students' parents requested an exemption, and 0.9% of students' records were missing.

There were 623 elementary schools in Utah during the 2007-2008 school year, and it would be too expensive and time consuming to visit all schools within the state to validate the electronic report. A Probability Proportional to Size sampling technique was used to ensure that each student had equal opportunity to be included in the study. Thirty-seven schools within Weber, Davis, Salt Lake, and Utah Counties (Wasatch Front), and 13 schools within the remaining Utah counties (non-Wasatch Front) were sampled. A total of 1,403 students were included in the sample. Audits were conducted by UIP staff. When UIP staff arrived at a school, they examined and recorded vaccines received by the students. Student records were either obtained from the Utah School Immunization Record (Pink Card) or a vaccine history printed by a student's physician. The student record was counted as missing if neither was available.

Results from this audit indicate that there is an overreporting of students who meet school requirements. Additional audits will be completed in the spring of 2009 to confirm or refute this finding. There was no statistically significant difference between coverage in Wasatch and non-Wasatch Front counties. This most common missing vaccine series was Hepatitis A.

| Students Who Met School Rule Requirement | | | |
|--|--------------------|------------------------------------|---------------------------|
| Category | Validation Finding | Validation 95% Confidence Interval | Electronic Report Finding |
| Met School Requirement | 79.90% | 77.76%, 82.04% | 83.92% |
| Exemption Requested | 2.9% | 2.0%, 3.8% | 2.93% |
| Missing Record | 1.2% | 0.6%, 1.8% | 0.94% |

| Wasatch vs. Non-Wasatch Front Schools | | |
|---------------------------------------|-----------------------------|-------------------------|
| Geographic Location | Percent Meeting School Rule | 95% Confidence Interval |
| Wasatch Front | 80.7% | 78.3%, 83.1% |
| Non-Wasatch Front | 77.5% | 73.2%, 81.1% |

| Missing Vaccine Series | | | | | | |
|----------------------------------|-------|-------|-------|-------|-----------|-------|
| Single Series Incomplete | | | | | | |
| | DTaP | Polio | MMR | Hep B | Varicella | Hep A |
| Number | 9 | 5 | 5 | 5 | 1 | 132 |
| Percent | 5.7% | 3.2% | 3.2% | 3.2% | 0.6% | 84.1% |
| Combination of Series Incomplete | | | | | | |
| | DTaP | Polio | MMR | Hep B | Varicella | Hep A |
| Number | 50 | 43 | 45 | 19 | 7 | 48 |
| Percent | 74.6% | 64.2% | 67.2% | 28.4% | 10.4% | 71.6% |

1. *Governor's Office of Planning and Budget*. Retrieved on April 30, 2008 from Utah Department of Health, Center for Health Data, Indicator-Based Information System for Public Health website: <http://ibis.health.utah.gov/>.
2. Office of Public Health Assessment (2008, May). *2006-2007 Utah Healthcare Access Survey*. [Data file]. Salt Lake City, UT: Utah Department of Health. **Note: numbers rounded to the nearest 100 persons.**
3. Office of Public Health Assessment (2008, July). *2006-2007 Utah's Health Status Survey* [Data file]. Salt Lake City, UT: Utah Department of Health. **Note: numbers rounded to the nearest 100 persons.**
4. Office of Public Health Assessment (2008, June). *2007 Health Status Survey* [Data file]. Salt Lake City, UT: Utah Department of Health.
5. CHEC Medicaid program (2007). *Form CMS-416: Annual EPSDT Participation Report FFY2007*. Salt Lake City, UT: Utah Department of Health.
6. Utah Immunization Program. (n.d.). *2007 program data* [Data file]. Salt Lake City, UT: Utah Department of Health.
7. Emergency Medical Services. (n.d.). *2007 program data* [Data file]. Salt Lake City, UT: Utah Department of Health.
8. Utah Immunization Program (November 2007). *Long-Term Care 2007 Annual Report*. Salt Lake City, UT: Utah Department of Health.
9. Department of Health and Human Services, CDC. (n.d.). *National Immunization Survey* [Data file]. Retrieved March 15, 2007 from <http://www.cdc.gov/nip/coverage/NIS/05/toc-05.htm>.
10. Utah Statewide Immunization Information System. *2005-2007 program data* [Data file]. Salt Lake City, UT: Utah Department of Health.
11. Utah Women, Infants, and Children (WIC) Program. (n.d.). *Monthly Participation Reports 2007*. Salt Lake City, UT: Utah Department of Health. **Note: numbers reported are the average of the 12 months in calendar year 2007.**
12. Utah Immunization Program (November 2007). *Licensed and Reporting Unlicensed Child Care Centers and Preschools: Child Care Annual Summary Report*. Salt Lake City, UT: Utah Department of Health.
13. Utah Immunization Program (November 2007). *Head Start: Child Care Annual Summary Report*. Salt Lake City, UT: Utah Department of Health.
14. Utah State Office of Education (2007). *Annual Report of the State Superintendent of Public Instruction: Utah 2006-2007*. Retrieved June, 2008 from <http://www.schools.utah.gov/default/AnnualReport.pdf>
15. *Behavioral Risk Factor Surveillance System*. Retrieved on June 6, 2008 from Utah Department of Health, Center for Health Data, Indicator-Based Information System for Public Health website: <http://ibis.health.utah.gov/>.

Immunization Program, Maternal and Child Health Bureau

Division of Community and Family Health Services
Utah Department of Health
PO Box 142001
Salt Lake City, Utah 84114-2001
Phone: (801) 538-9450
Fax: (801) 538-9440
Websites: www.immunize-utah.org
www.usiis.org

Utah Statewide Immunization Information System

Division of Community and Family Health Services
Utah Department of Health
Helpline: (801) 538-3440
(800) 678-3440
Websites: www.immunize-utah.org
www.usiis.org

Data Resources Program, Maternal and Child Health Bureau

Division of Community and Family Health Services
Utah Department of Health
PO Box 142001
Salt Lake City, Utah 84114-2001
Phone: (801) 538-6916
Fax: (801) 538-6591
Website: www.health.utah.gov/drps

Child Adolescent School Health Program, Maternal and Child Health Bureau

Division of Community and Family Health Services
Utah Department of Health
PO Box 142001
Salt Lake City, Utah 84114-2001
Phone: (801) 538-9459
Fax: (801) 538-9409
Website: www.health.utah.gov/cash

Women, Infants, and Children Program, Maternal and Child Health Bureau

Division of Community and Family Health Services
Utah Department of Health
PO Box 141013
Salt Lake City, Utah 84114-1013
Phone: (801) 538-6620
Fax: (801) 538-6729
Website: www.health.utah.gov/wic

Other Resources Available

National Immunization Program
National Immunization Data and Statistics
Immunization Action Coalition
Healthy People 2010
Utah Department of Health
Utah Maternal and Child Health Bureau
Utah Office of Public Health Assessment
Office of Health Care Statistics
Utah Medicaid Program

www.cdc.gov/vaccines
www.cdc.gov/vaccines/stats-surv/default.htm
www.immunize.org
www.healthypeople.gov
www.health.utah.gov
www.health.utah.gov/cfhs/mch
<http://ibis.health.utah.gov>
www.health.utah.gov/hda
www.health.utah.gov/medicaid